

MIPB

Military Intelligence Professional Bulletin

July - September

2004

PB 34-04-3



Joint and Expeditionary Capabilities



**Within the Intelligence
Community**

From the Editor

This issue's focus is on joint and expeditionary capabilities within the intelligence community. U.S. Joint Forces Command (JFCOM) has contributed two articles. The first one discusses that command's efforts to "optimize joint intelligence" to support the combatant commands. The second article outlines the evolution of intelligence support to Effects-Based Operations as an expeditionary warfare concept.

From the field, Lieutenant Joseph Nelson contrasts commanders' priority intelligence requirements (PIRs) in stability operations and support operations with those of more traditional operations. Captain Brian Gellman also addresses PIRs and intelligence synchronization methodology on the nonlinear battlefield. Major (P) Christopher Fatheree, USMC, recounts how forward deployed intelligence analysts used reachback capabilities to support Marine Expeditionary Units, adjacent U.S. forces, and coalition forces in operations in Afghanistan and Pakistan.

CW3 Sharon Curcio offers us a cultural awareness article based on observations gleaned from interviews regarding the experiences of the younger generation of jihad participants in Afghanistan.

In the "Doctrine Corner," Mr. Michael Brake updates us on the status of intelligence manuals. The Intelligence Toolkit, prepared by Doctrine Division, has been sent out to the community. All Active and Reserve intelligence sections from battalion level up should receive a copy. If you have not received the CD or need to update your unit address please use the website in the Doctrine Corner.

We have added a new department to **MIPB**: "Language Action." Mr. Peter Shaver, Chief, Language Branch of the Training, Analysis, Development Division, USAIC&FH will regularly update us on activities within the language arena. Welcome, Mr. Shaver!

MIPB themes for 2005 have been selected:

Intelligence Support to Operations in the Urban Environment, January - March

An Adapting Threat and Adapting to the Threat, April - June

Leadership Development in Intelligence, July - September

Diversity in the Intelligence Work Force, October - December

Please participate in the intelligence community's professional development by sharing your thoughts and experiences in these areas. Further information on how to contribute articles or letters as well as deadline dates can be found on page 80.

Sterilla A. Smith

Sterilla A. Smith
Managing Editor



MILITARY INTELLIGENCE

PB 34-04-3

Volume 30 Number 3

July-September 2004



FEATURES

STAFF:

Commanding General

Brigadier General Warner I. Sumpter

Deputy Commandant for Training

Colonel Brian A. Keller

Deputy Commandant for Futures

Jerry V. Proctor

Director of Training Development and Support

Colonel Eileen M. Ahearn

Deputy Director/Dean of Training Development and Support

Russell W. Watson, Ph.D.

Chief, Doctrine Division

Stephen B. Leeder

Managing Editor

Sterilla A. Smith

Editor

Elizabeth A. McGovern

Design Director

SSG Sharon K. Nieto

Associate Design Director and Administration

Specialist Anglene L. Myers

Cover Design:

SSG Sharon K. Nieto

Purpose: The U.S. Army Intelligence Center and Fort Huachuca (USAIC&FH) publishes the *Military Intelligence Professional Bulletin* quarterly under provisions of AR 25-30. MIPB disseminates material designed to enhance individuals' knowledge of past, current, and emerging concepts, doctrine, material, training, and professional developments in the MI Corps.

Subscription: Subscription rates are \$21.00 (Domestic, APO, and FPO) and \$29.40 (Foreign). For information on subscriptions, see page 4.

Disclaimer: This publication presents professional information, but the views expressed herein are those of the authors, not the Department of Defense or its elements. The content does not necessarily reflect the official U.S. Army position and does not change or supersede any information in other U.S. Army publications. We reserve the right to edit any submitted material.

Contact Information for MIPB is on page 80.

- 6 **Joint Intelligence Transformation—Bridging the Gap**
by Lieutenant General Robert Wagner and Colonel Stephen P. Perkins
- 11 **Effects-Based Operations and Its Enabling Capabilities in Expeditionary Warfare**
by Colonel Stephen P. Perkins and Lieutenant Colonel John D. Jackson, II, USAR
- 20 **Overview of Joint STARS: Capabilities and Employment**
by Captain Charles L. Hiter
- 28 **Shadow TUAV Mission Process—The Goal Is Always the Right Video to the Right User**
by Captain Matthew T. Gill
- 32 **What is "DCGS-A"?**
by Colonel Stephen J. Bond
- 37 **Do "Steady State" PIRs Work In Stability Operations and Support Operations? Answering the Commander's Intelligence and Decisionmaking Needs**
by Lieutenant Colonel Joseph A. Nelson
- 43 **Intelligence Synchronization on a Nonlinear Battlefield**
by Captain Brian Gellman
- 48 **The Search for Weapons of Mass Destruction: Not a New Problem**
by Thomas N. Hauser
- 54 **Generational Differences in Waging Jihad: Minds Unalike**
by Chief Warrant Officer Three Sharon K. Curcio, USAR
- 60 **Intelligence Support to Marine Corps Combat Operations in Afghanistan**
by Major Christopher L. R. Fatheree, USMC

DEPARTMENTS

- | | | | |
|----|--|----|--|
| 2 | Always Out Front | 77 | 111th MI Brigade Training Notes |
| 3 | CSM Forum | 79 | Language Action |
| 68 | CSA's Focus Area 16: Actionable Intelligence | 80 | Contact Information |
| 72 | Doctrine Corner | | Inside Back Cover |
| 74 | Proponent Notes | | 302d MI Battalion (Operations) (Corps) |

By order of the Secretary of the Army:
Official:

JOEL B. HUDSON

Administrative Assistant to the
Secretary of the Army

0413302

PETER J. SCHOOMAKER

General, United States Army
Chief of Staff

Always Out Front

by Brigadier General Warner I. Sumpter
Commanding General, U.S. Army Intelligence Center and Fort Huachuca



Four Essential Strengths of the Military Intelligence Corps

Intelligence drives operations across echelons and during full-spectrum operations across the spectrum of conflict. We are a crucial part of this nation's security, so we must stay focused! We must continue the cycle of learning, sharing information, and training so that we can continue to improve the intelligence support we provide. Concurrent with improving intelligence, we must transform ourselves as an integral part of the Army's transformation to a more

modular and capable force. I cannot predict every exact detail of how the Army and intelligence will soon transform, but I know that there will be a vast amount of change in the near future. While some areas are uncertain and may be stressful to you, we can rest assured that the next generation of the Army and the Military Intelligence Corps will be a better and more capable force with your help.

The source of my confidence in the future is the "rock solid" base of our current force—the world's greatest force ever. While a somewhat simplified view, I want to address four essential strengths of the MI Corps.

The best-trained soldiers in the world. We are good and we are getting better. Training has always been and always will be a serious and continual endeavor within MI. Important steps have been taken across the board to improve the quality of training—officer, warrant officer, and enlisted training; analog and digital training; and institutional and unit training. A number of important initiatives the Intelligence Center has sponsored recently include a variety of mobile training teams to support ongoing operations and the creation of new courses.

Solid fundamentals. Capturing lessons learned and improving operations are also important tasks. However, we often overlook that our time-tested fundamentals—like intelligence preparation of the battlefield (IPB), other analytical skills, and intelligence synchronization (formerly collection management)—apply just as much today and tomorrow as



they did in the past. We must constantly create or revise tactics and techniques, but the fundamentals rarely change and they are solid. It is critical that we retain and perfect the art and science of executing these fundamentals.

A wealth of experience. The experience of the collective body of the MI Corps extends across a very wide range of strategic, operational, and tactical assignments and many unique operations and environments. This experience has served us well and is a key source of our strength as a branch. We must maintain a pool of experienced and balanced professionals who

have excelled across many different echelons and assignments. As we move into the future, one area where we can continue to strengthen the Corps is through more focused specialization of our officers, warrant officers, and noncommissioned officers within their respective intelligence disciplines. The future demands intelligence discipline experts second to none. Managing our Corps to support this goal will take a concerted effort to change some of the current career progression paradigms.

A strong ethical foundation. The Army is a values-based organization. That is why the events at the Abu Ghraib prison were so disturbing to the thousands of professionals in our ranks. I feel this is truly a case of the very rare exception. The U.S. Army Intelligence Center neither trains nor condones the types of activities described in recent media reports, which do not even remotely fall within the realm of Army values. We train MI soldiers to conduct themselves with the highest standard of professionalism within the guidelines of Army policy and the law and in accordance with Army values. Army leadership is thoroughly investigating these allegations, and the individuals responsible for these despicable acts will be dealt with accordingly. I know the Army will get to the bottom of this and do the right thing.

Over the past few months, we have reviewed human intelligence (HUMINT) collector doctrine and training and have found

(Continued on page 4)

CSM Forum

by Command Sergeant Major Lawrence J. Haubrich
U.S. Army Military Intelligence Corps



Ethical Leadership

"When I do good, I feel good; when I do bad, I feel bad. That's my religion."

—Abraham Lincoln

With the recent allegations of prisoner abuse at Abu Ghraib Prison, Guantanamo Bay, and elsewhere, this seems like a good time to discuss ethical leadership and Army Values. Webster's dictionary defines "ethic" as "a principle of right or good behavior." I would define "ethics" as "the ability to distinguish good from bad, and right from wrong."



U.S. military leaders are the role models for their peers and their subordinates—like it or not—and, for most of us, this is a deeply ingrained factor, influencing our daily lives. Stephen R. Covey points out the important distinction between managers and effective leaders: *"Management is doing things right; leadership is doing the right things."*¹ This speaks not only to the clear distinction between a manager and a leader, but also emphasizes the added ethical responsibility inherent in the leadership role. Case studies of My Lai, Vietnam, highlight the extreme nature of the problem for military leaders and the significant impact on operations when ethical judgment has failed. Just as important as ethical individual actions is the ethical climate established by the command in any military organization.

An ethical command climate is **critical** in positively influencing the junior leaders' thoughts and actions in a unit. Taking over a "squared away" unit is much easier than changing the course of a unit that has gotten off the ethical path. Everyone makes mistakes and has lapses of judgment, so any leader should anticipate occasional minor adjustments and corrections. What the leader should strive for is a **proactive** environment in which the unit's leadership controls the situation, vice a **reactive** environment where the situation dictates the response. In other words, control your own environment, at least to the extent possible.

One of the greatest challenges facing military leadership is the inherent risk associated with serving in the armed forces.

Risk takers tend to be more action-oriented, extroverted, and generally more inclined to get themselves into trouble than the rest of the population. So when your subordinates make "honest" mistakes, avoid the urge to crucify them. Maintaining consistency and a sense of fairness will go a long way toward developing and maintaining the cultural climate in an organization. Military leaders should always place the welfare of subordinates above their own welfare. This not only sets the best example, but it generates trust and loyalty. Actions speak louder than words

in this regard, so effective leadership will "walk the talk." The organization is a direct reflection of its leadership—in success and in failure.

One characteristic of military professionals is the relatively large amount of responsibility thrust upon them, even at junior leadership levels. A platoon leader, fresh out of the Reserve Officer Training Corps, usually has 25 to 50 soldiers, for whose health and welfare he or she is directly responsible. A Colonel or a Command Sergeant Major may be responsible for hundreds or thousands of soldiers. The professional code of ethics requires the support and defense of *The United States Constitution* "against all enemies, foreign and domestic." One should recognize that the allegiance required is to the *Constitution*, not to an individual; in no case should this professional allegiance be confused with blindly following the orders of superiors. Consequently, not only is a real understanding of the values underlying the *Constitution* and its Amendments necessary, so is a willingness to act when necessary to protect those ideals.

Additional requirements for the military professional include:

- ☐ Placing duty first, before any personal interest.
- ☐ Accepting full responsibility for the actions of subordinates.
- ☐ Developing and maintaining the very highest professional standards—"Be, Know, Do."

(Continued on page 5)

Always Out Front (Continued from page 2)

that we are right on the mark. In order to address the issues associated with Abu Ghraib, we have: conducted our own internal analysis, fully cooperated in Department of Defense (DOD) and other Inspectors General inspections, answered many requests for information from various agencies, and held a media day.

We can be proud that we are legally and aggressively updating doctrine and training with the most current lessons learned and tactics, techniques, and procedures. We were rewriting HUMINT doctrine with the final draft out when the allegations came to light. We have undertaken a major effort, in coordination with the Military Police School, Department of the Army (DA) G2, Office of the Judge Advocate General, and JAG Legal Center and School to incorporate what we believe to be necessary additional changes to the doctrine.

The DA Office of the JAG and JAG School reviewed each draft of **FM 2-22.3, HUMINT Collector Operations**, and each draft has been (and still is) in compliance with all

Geneva Conventions, international agreements, and U.S. law. Additionally, the manual clarifies the responsibilities of HUMINT collectors and clearly delineates between HUMINT collection and other activities associated with detainee operations. Finally, the manual now includes HUMINT collection techniques like strategic debriefing and elicitation as a result of the recent HUMINT and Counterintelligence Integrated Concept Team and lessons learned.

While we can be proud of these essential strengths, there is more hard work and many tough issues remaining to tackle; the Global War on Terrorism continues. As an integral part of that effort, we—Army, DOD, and national intelligence professionals—must continue to surge and make the sacrifices necessary to support the commander, conduct successful operations, and win. We must maintain our strengths while we find new ways to improve ourselves in spite of the incredible operational tempo we all face. This is our challenge and our calling.

ALWAYS OUT FRONT!



Order Processing
Code *6489

MIPB SUBSCRIPTION

Subscription Order Form

VISA

MasterCard

DISCOVER

Please send me _____ subscription(s) for _____ years (no more than 2) for Military Intelligence Professional Bulletin (MIPB). \$21.00 (Domestic, APO, and FPO); \$29.40 (Foreign) per year.

The total cost of my order is \$ _____. All prices include regular domestic postage and handling and are subject to change. I understand this charge is not refundable.

Mail to: ATTN: ATZS-FDT-M, U.S. Army Intelligence Center and Fort Huachuca, 550 Cibique Street, Fort Huachuca AZ 85613-7017

E-mail us at: MIPB@hua.army.mil

Address

(Company or Personal Name)

(Street Address)

(Additional Address/ Attention Line)

(City, State, ZIP Code)

(E-mail Address and Telephone Number)

Please choose method of payment:

☐

Checks payable to the **Superintendent Of Documents**

☐

GPO Deposit Account No:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

☐

MasterCard

☐

VISA

☐

Discover

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Expiration Date: _____

Please include your E-mail address so we can confirm receipt of payment.

CSM Forum (Continued from page 3)

- ☐ Submitting, without reservation, to civilian control of the military.
- ☐ Obeying all laws of war and service regulations.

Military professionals also subordinate their personal welfare and interest to the good of the group, not always the most natural thing for someone from a society such as ours where individual needs and goals usually take priority over those of the group.

Leaders must set the highest ethical standards for themselves and strive to attain them. Treat the lowest-ranking Privates with the respect due them as human beings. Subordinates should not be afraid to approach their leaders; leaders should be confident enough in themselves to acknowledge and even consider points of view that may be at odds with their own perspectives. Once leaders have made decisions, however, negotiations are over, and professional soldiers recognize this. Ultimately, ethical responsibility lies with the individual. There are certain limits to the legal obligation to follow orders when they are immoral. Effective leaders develop subordinates who think for themselves.

There are very few things we are called upon to do in a military operation for which we cannot anticipate and train. For the answers that do not fall into neat categories, though, we should ensure that our forces are capable of independent thought and actions based on sound ethical principles.

Combat is a very harsh, unforgiving environment and we really do need to create a climate where correct ethical decisions are made almost instinctively at all levels of Army leadership.

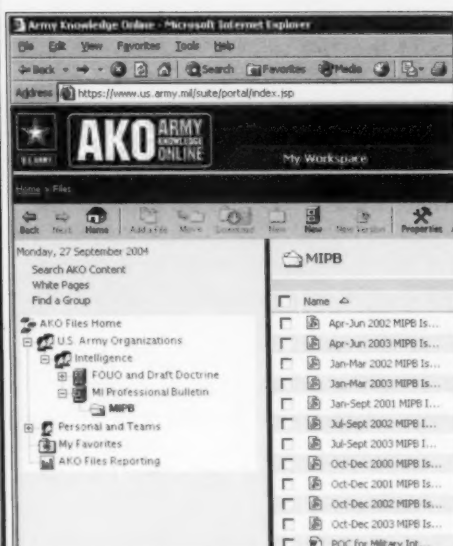
"We are, have been, and will remain a values based institution. Our values will not change and they are non-negotiable. Our Soldiers are Warriors of character. They exemplify these values every day and are the epitome of our American spirit. They are the heart of the Army."²

As always, I thank you all for what you do and continue to do for our MI Corps and our Army. Remember, let's take care of each other and our families. You train hard, you die hard; you train easy, you die easy. Peace needs protection.

Endnotes

1. Covey, Stephen R., **The Seven Habits of Highly Effective People: Powerful Lessons in Personal Change** (New York, NY: Simon and Schuster, 1990), page 101.
2. Schoomaker, Peter J., General, Arrival Message as 35th Chief of Staff of the Army, available online at http://www.hooah4health.com/new/2003newsflash/schoomaker_arrival.htm.

ALWAYS OUT FRONT!



MIPB ONLINE

The **Military Intelligence Professional Bulletin (MIPB)** is now online at two different sites.

To view past issues of **MIPB** up to and including the July September 2003 issue, log on to:

Army Knowledge Online (AKO). You must have an established AKO account to access this site. Click on the files tab (replaces KCC) at the top of the page. At the left side of the page under U.S. Army Organizations click on Intelligence, then click on **MI Professional Bulletin**.

Intelligence Center Online Network (ICON) at <https://iconportal.hua.army.mil>. You must have an established ICON account to access this site. After logging on click on the MIPB Tab.

JOINT INTELLIGENCE TRANSFORMATION— BRIDGING THE GAP

by Lieutenant General Robert Wagner and
Colonel Stephen P. Perkins

"Joint transformation does not happen overnight. It is a learning, developmental, cultural change process for the U.S. military to progress through phases of 'Deconflict to Coordinate and Integrate; and ultimately Coherently Joint.'"

—Admiral Edmund P. Giambastiani, U.S. Navy,
1 September 2004¹

Like the military as a whole, U.S. Joint Forces Command (JFCOM) has transformed to serve as the Defense Department's agent for **joint operational transformation** even as we have been deeply involved in supporting operations around the world. The divestiture of our geographic area of responsibility in 2002 has enabled the command to focus on the future while assisting fellow Combatant Commands to meet operational challenges around the world. JFCOM is delivering:

- ❑ Trained and ready joint forces to the regional combatant commanders.
- ❑ Coherent joint capabilities and operational methods to the joint warfighter of today.
- ❑ Common joint context to Service experimentation programs that will lead to new "born joint" capabilities of tomorrow.
- ❑ Beginnings of a new culture of **joint transformation**.

Taking guidance from the Unified Command Plan, the Defense Department's priorities, combatant commander requests, and operational lessons learned, JFCOM is working to "optimize joint intelligence"—allowing us to bridge the national to tactical gap. Specifically, the J2 is JFCOM's lead for Joint Operational Intelligence Transformation (JOIT); intelligence, surveillance, and reconnaissance (ISR); and battle damage and effects assessment (BDA/EA). Joint Forces Command works joint intelligence within four engines of transformation (joint concept development and experimentation; joint training and education;

joint integration and interoperability; and as the global joint force provider) to support transformation and to deliver "born joint" products to the warfighter.

Joint Concept Development and Experimentation

Guided by the Secretary of Defense's policies and priorities and under the direction of the Chairman of the Joint Chiefs of Staff, JFCOM uses a two-path strategy. One pathway produces prototypes that enhance near-term joint warfighting. The other pathway produces concepts that describe future warfighting methods and capabilities. On both pathways, JFCOM has established many productive experimental partnerships. Combatant Commands, the Services, the Joint Staff, representatives of the Office of the Secretary of Defense, combat service agencies, other Federal agencies like the Department of State, and multinational partners all participate in a robust way in both prototyping experimentation and experiments to develop and refine future concepts.

The Standing Joint Force Headquarters-Core Element (SJFHQ-CE) with its enabling capabilities is a primary JFCOM prototype. The prototype is the cornerstone of the Department of Defense (DOD) transformational effort. It allows for rapid stand up of a fully functional operational-level joint task force (JTF) headquarters. Specifically, the SJFHQ-CE is a coherently joint organization that is skilled in effects-based operations (EBO), uses an operational net assessment (ONA) to understand the battlespace, and employs a Joint Interagency Coordination Group (JI-ACG) to ensure that all elements of national power can be brought to bear in a coherent manner. The SJFHQ-CE plans, prepares, and executes simultaneous and distributive staff work and command activity using a robust collaborative information environment (CIE) including a Joint Enroute Mission Planning and Rehearsal System-Near Term (JEMPRS-NT), which allows the command and staff to stay part of the overall force network regardless of location and mode of transport. The SJFHQ-CE prototype is an integration

of organizational, procedural, and materiel prototypes and the best example of how JFCOM prototypes go beyond the typical prototype paradigm.

In addition to these near-term improvements to joint warfighting, JFCOM has produced a set of future-oriented concepts:

- ☐ Major combat operations.
- ☐ Security, transition, and reconstruction operations.
- ☐ Joint forcible-entry operations.
- ☐ Joint urban operations.
- ☐ Joint force projection and sustainment operations.

This set not only describes a particular military problem that the future joint force may face, but also proposes a credible solution to that problem with the set of capabilities that must be achieved for the solution to work. In this way, JFCOM and its Service partners can help identify options for future investments as well as fruitful concepts to prototype and further areas in which to experiment.

Joint Forces Command is in active partnership in Service concept development wargames and collaborates with our North Atlantic Treaty Organization (NATO) allies in multinational experiments. In alliance with the Allied Command-Transformation, JFCOM is maturing concepts for information sharing and effects-based planning in coalition environments. For example, elements of the Joint Forces Intelligence Command (JFIC) Directorate of Experimentation have been active participants in several multi-agency, DOD-level Intelligence Community experiments, including the joint/interagency event called Thor's Hammer,² focused on interagency processes, integration, and analytical tools.

Finally, in support of an Under Secretary of Defense for Intelligence initiative, the JFCOM J2 is conducting an Intelligence Campaign Planning (ICP) Joint Concept Development and Experimentation Program. The ICP is a comprehensive methodology for synchronizing and integrating intelligence into the commander's adaptive planning system and operations processes. The ICP will be aligned with the SJFHQ-CE prototype and emerging concepts currently in the prototype phase.³

Joint Training and Education

A key JFCOM and DOD initiative is the Joint National Training Capability (JNTC). The JNTC integrates Service training capabilities⁴ into a nationwide joint

network to improve the ability of U.S. forces to fight effectively as a joint and combined team. This capability will link the Service ranges and simulation capabilities with forces around the country, and ultimately around the world, in a common joint environment at the operational level. As a new training transformation effort, JNTC produces "born joint" training—combining live, virtual, and constructive venues without duplicating Service training. In coordination with the U.S. Army Intelligence Center and Fort Huachuca, JFCOM brought an enhanced joint rigor and context to the Joint Intelligence Combat Training Center and the joint Intelligence Community.

Additionally, in support of JNTC, the JFCOM J2 is investigating its ability to create a Joint Intelligence National Training Capability to leverage national, joint, and Service intelligence capabilities. Partnering with the National Defense University, JFCOM is working to inculcate coherent joint operations into Service-level training and education. In addition to the General/Flag Officer Capstone Course Joint Operations Module conducted at the Joint Warfighting Center in Suffolk, Virginia, JFCOM is examining ways to increase its support to prospective JTF commanders. The JFCOM J2 serves as the representative and advocate for the Combatant Commands on the General Intelligence Training Council, and operates a Regional Joint Intelligence Training Facility (RJITF). The JFCOM RJITF has the lead for joint intelligence preparation of the battlespace and provides joint intelligence training support to JFCOM exercises. The need for training JTF J2s is an emerging requirement that would benefit Service senior intelligence officers at the O-5 and O-6 levels.

Joint Integration and Interoperability

The JFCOM Joint Integration and Interoperability Office addresses material and nonmaterial solutions to interoperability challenges by working closely with other Combatant Commands, Services, and defense agencies to identify and resolve joint warfighting deficiencies. The JEMPRS-NT system, described earlier, is a good example. In partnership with the joint community, JFCOM leads the Joint Battle Management Command and Control (JBMC2)⁵ initiative designed to develop a common joint operational command and control (C2) capability. The JFCOM J2 leads the congressionally mandated Joint Operational Test Bed System initiative, which serves as a transformational forcing function for joint unmanned aerial vehicle (UAV)

operations to discover the appropriate level of UAV interoperability for the JTF.

Global Joint Force Provider

In coordination with JFCOM Service components and geographical combatant commanders, JFCOM provides joint forces and capabilities in response to combatant commander requirements. Current defense strategy requires us to expand from a condition where Services alone organize, train, and equip Service forces to where those same functions are coherently applied to source, train, and equip fully functional joint forces. As an example in preparing for a joint mission, JFCOM's Joint Warfighting Center teamed with the Army's Battle Command Training Program trainers to provide a joint, interagency, multinational context for III Corps and the joint, interagency, multinational joint mission rehearsal exercise and leader development training before their late 2003 deployment to Iraq.

Joint Forces Command and its components initiated an exchange of officers to enable "Service component operational 3-Star headquarters that are candidates for future JTF[s]" to be better prepared to assume JTF duties. Specifically, the Joint Manpower Exchange Program (JMEP) involves the initial permanent change of station exchange of 28 officers and 2 senior enlisted soldiers between Army, Air Force, Navy, and Marine Corps 3-Star headquarters under JFCOM combatant command, including XVIII Airborne Corps, 12th Air Force, Second Fleet, and II Marine Expeditionary Force. Embedding "jointness" in our senior operational headquarters through the JMEP will enhance the joint warfighting capability of these headquarters by establishing a baseline of Service experts. Additionally, to address real-time theater requirements, the JFCOM J2 deployed a Quick Reaction Team, consisting of targeteers and collection managers, to U.S. Central Command (CENTCOM) for Operations ENDURING FREEDOM and IRAQI FREEDOM (OEF and OIF, respectively).

Support to the Global War on Terrorism

In a transformational way, JFCOM in partnership with CENTCOM examined OIF from the joint operational-level perspective. Brigadier General (BG) Robert W. Cone,⁶ assisted by senior mentor, retired Army General Gary E. Luck, led a team of 35 joint staff officers to conduct "a dynamic assessment of the warfighting process vice post-mortem."⁷

Notable among the lessons learned were the increase in the amount of bandwidth, the scale and speed of maneuver, and use of special operations forces. There was also an effort—similar to the post-World War II discussion effort described in **German Generals Talk**⁸—to examine how the Iraqis perceived the coalition attack. The team identified several elements of a transformed force that are critical to warfighters and the Intelligence Community: networked C2 and ISR, precision weapons and precision ISR, and EBO. As a part of the quick look for lessons learned, the team saw joint integration and adaptive planning as an area requiring sustainment and improvement, while ISR was a capability that demonstrated considerable effectiveness but needed enhancement. BG Cone noted, "But when you take a large country the size of Iraq, with all those sensors and communications, how do you get the right information to the right person who needs it in a timely manner?"⁹ The JFCOM team viewed BDA, fratricide prevention, and coalition information sharing as capabilities that fell short of expectations and needed new initiatives to address the problem areas.

Studying OIF and subsequent operations in Haiti and the Global War on Terrorism, the JFCOM Lessons Learned Team gained valuable insights into Knowledge-Enabled Warfare and EBO concepts. Effects-Based Operations, a JFCOM future warfighting concept, and JFCOM's transformation efforts will benefit from JFCOM's Joint Center for Operational Analysis' efforts.¹⁰ Finally, JFCOM has made comprehensive recommendations to the Chairman of the Joint Chiefs of Staff to address OIF lessons learned findings.

Joint Operational Intelligence Initiatives

The Defense Intelligence Community faces a unique, very dynamic, and challenging task of transforming operational-level intelligence while our nation is at war. Joint Forces Command's supporting initiatives focus on joint operational intelligence transformation and building the functional bridge between JOIT and the Intelligence Community. Key to this effort is Joint Intelligence Training and the Joint Intelligence Concept Development and Experimentation process, which afford JFCOM the opportunity to project future theater intelligence requirements and to experiment with emerging capabilities that support these requirements to deliver innovative solutions to the future force. Traditional intelligence missions are joined by the challenge of ever increasing nontraditional in-

telligence roles. The current Global War on Terrorism requires JFCOM to deliver "quick-win" capabilities to the field—such as the counterintelligence and human intelligence (J2X) Operational Management Training Course, a direct result of OIF lessons learned—while also conducting Joint Intelligence Concept Development and Experimentation for the longer term.

While focused on the warfighter, JFCOM intelligence transformation efforts respond to Defense priorities, Transformation Planning Guidance, the Director, Defense Intelligence Agency, and to the Under Secretary of Defense for Intelligence. *The DOD Strategic Planning Guidance 2006-2011* directed JFCOM to provide a strategy and roadmap to optimize joint operational intelligence. The JOIT strategy and roadmap will lay the path for operational-level intelligence transformation and ensure JFCOM efforts are in harmony with the Intelligence Community and are fully integrated and consistent with the overall transformation of DOD. The focus is on the stated requirements of operational-level warfighters and allows them to achieve decision superiority, coherent joint effects, and distributive operations. Leveraging the Distributed Common Ground/Surface System's capabilities, JFCOM is working to enhance J2X and ISR capabilities. Finally, JOIT supports all transformation activities across domain, echelon, and intelligence disciplines and can be leveraged to support the Joint Staff's Functional Capability Boards and JBMC2 initiatives and missions.¹¹

Conclusion

Transformation is underway and current combat operations require us to accelerate our efforts. In recent testimony to the Senate Armed Services Committee, the U.S. Special Operations Command's Director of the Center for Intelligence and Information Operations concluded,

*"...there is much work to be done to protect our nation, accomplish our missions, and take the fight to the enemy. ...Our process assures improvement in effectiveness and efficiency of operations as we adjust through lessons learned and changes to the battlefield."*¹²

The JFCOM will continue to provide Soldiers, Sailors, Airmen, and Marines with the **joint** capabilities they need today and the transformational capabilities our **Joint** Force will require in the future. JFCOM continues to partner with its sister Combatant Commands, the Services, and defense agencies and solicits expanding partnerships with the interagency

community, our allies and coalition partners, and with industry and academia. The power of collaboration allows the joint, interagency, multinational team to take the fight to the enemy on **our** terms.



Endnotes

1. Giambastiani, Edmund P., Admiral, U.S. Navy, to Lieutenant General Wagner, 1 September 2004.
 2. Thor's Hammer was a co-hosted National Reconnaissance Office, Strategic Command, and Special Operations Command event. It was set in a global crisis in the next decade and aimed to improve interagency processes in the areas of space-based information management and integration.
 3. Garraghty, Van, *Draft Concept Primer—Intelligence Campaign Planning (ICP)*, U.S. Joint Forces Command, undated.
 4. The Navy's Top Gun, the Air Force's Air Warrior and Red Flag, and the Army's National Training Center are good examples of earlier Service initiatives to address specific Service training requirements.
 5. The JBMC2 capability will enable the future Joint Force to plan, coordinate, execute, and assess effects-based operations (EBO) in a coherently joint and net-centric manner. The JBMC2 transformational efforts include SJFHQ, CIEs, standard deployable C2 capabilities, netted Joint Force initiatives, integrated Joint fires, and the JNTC.
 6. Cone, Robert W., BG, U.S. Army, briefing on Joint Lessons Learned from Operation IRAQI FREEDOM, 2 October 2003, available at <http://www.globalsecurity.org/military/library/news/2003/10/mil-031003-dod02.htm>.
 7. Ibid.
 8. Hart, Basil H. Liddell, British Captain, **German Generals Talk** (New York, NY: William Morrow and Company, Inc., 1948). The German generals who survived Hitler's Reich discussed World War II with Captain Hart, a noted British military strategist and writer. They spoke as professional soldiers to a man they knew and respected.
 9. Cone briefing.
 10. Ibid.
 11. U.S. Joint Forces Command, *Joint Operational Intelligence Transformation—A Strategy and Roadmap to Optimize Intelligence for USJFCOM's Transformation Mission (Draft)* (Norfolk, VA: U.S. Joint Forces Command, 1 August 2000), page 2.
 12. Wurster, Donald, BG, U.S. Air Force, Statement before the Strategic Forces Subcommittee for the Senate Armed Services Committee on the Fiscal Year (FY) 2005 Tactical Intelligence and Related Activities (TIARA) and Joint Military Intelligence Program (JMIP) budget requests on 7 April 2004, page 15.
- Lieutenant General Wagner is the Deputy Commander, U.S. JFCOM, Norfolk, Virginia. He has held command and staff intelligence assignments including Company Commander*

in 2d Ranger Battalion; Commander, 2-187 Infantry; Commander, 1st Ranger Battalion; Commander, 193d Light Infantry Brigade; Commander, Special Operations Command-South; Deputy Director for Current Operations (J33), The Joint Staff; and Commanding General, U.S. Army Southern European Task Force (Airborne). LTG Wagner served in combat during Vietnam with the 101st Airborne Division (Airmobile) and Advisory Team 33, USMAC-V, and made a combat jump into Panama during Operation JUST CAUSE.

Colonel Perkins is the Director of Operations (J3), Joint Information Operations Center, at Lackland AFB, Texas. He was the Deputy Director for Intelligence Operations (J23) and the J2X, at U.S. Joint Forces Command. He has held command and staff intelligence assignments including Company Commander, 1st Battalion, 14th Infantry; S2, 2d Brigade, 101st Airborne Division (Air Assault); and Commander, 103d MI Battalion. Readers may contact COL Perkins via E-mail at stephen.p.perkins@us.army.mil and by telephone at (210) 977-2911 or DSN 969-2911.

References

Barker, Mike, "JCLL Update," Joint Center for Lessons Learned (JCLL) Bulletin, Volume VI, Issue 2, March 2004, page iv.

Benigni, Jessica, JO2, U.S. Navy, "USJFCOM develops Joint Manpower Exchange Program," 1 September 2004. Available at <http://www.jfcom.mil/newslink/storyarchive/2004/pa081104.htm>.

Chu, David S. C., Under Secretary of Defense (Programs and Requirements), Memorandum for Secretary of Defense, "Joint Duty Assignment List Validation Nomination Package," 28 May 2004.

Cone, Robert W., Brigadier General, U.S. Army, *Briefing on Joint Lessons Learned from Operation IRAQI FREEDOM*, 2 October 2003. Available at <http://www.globalsecurity.org/military/library/news/2003/10/mil-031003-dod02.htm>.

Garraghty, Van, *Draft Concept Primer—Intelligence Campaign Planning (ICP)*, U.S. Joint Forces Command, undated.

Giambastiani, Edmund P., Admiral, U.S. Navy, "Born Joint," *CHIPS*, Spring 2004, pages 6-9.

Jackson, Chris, "ISR/EA Objective CORE Update to CoS," presented to Major General Soligan, U.S. Air Force, JFCOM Chief of Staff, 28 June 2004.

Jacoby, Lowell E., Rear Admiral, U.S. Navy, Statement for the Record to the Senate Armed Services Committee, 17 October 2002.

Murray, Williamson, and Scales, Robert H., Major General, U.S. Army (Retired), *The Iraq War: A Military History* (Cambridge, MA: The Belknap Press of Harvard University, 2003).

Myers, Grover E., Lieutenant Colonel, U.S. Air Force, "MILLENNIUM CHALLENGE 2002—Setting the Mark," *Joint Forces Quarterly*, Winter 2002-2003, pages 23-29.

Myers, Richard B., General, U.S. Air Force, "A Word from the Chairman," *Joint Forces Quarterly*, Winter 2002-2003, pages 1, 4-8.

Rumsfeld, Donald, Secretary of Defense, Remarks to the U.S. Joint Forces Command During the Change of Command, 2 October 2001.

U.S. Army, "On Point"—The United States Army in Operation IRAQI FREEDOM," (Fort Leavenworth, KS: Center for Army Lessons Learned, 11 July 2004). Available at <http://www.globalsecurity.org/military/library/report/2004/onpoint/intro.htm>.

U.S. Joint Forces Command. *Joint Operational Intelligence Transformation—A Strategy and Roadmap to Optimize Intelligence for USJFCOM's Transformation Mission (Draft)* (Norfolk, VA: U.S. Joint Forces Command, 1 August 2004).

Joint Manpower Exchange Program for Service Component Senior Operational Headquarters, Transformation Change Package (Draft) (Norfolk, VA: US Joint Forces Command, 7 January 2004).

Wurster, Donald, BG, U.S. Air Force. Statement before the Strategic Forces Subcommittee for the Senate Armed Services Committee on the Fiscal Year (FY) 2005 Tactical Intelligence and Related Activities (TIARA) and Joint Military Intelligence Program (JMIP) Budget Requests on 7 April 2004.

Effects-Based Operations and Its Enabling Capabilities in Expeditionary Warfare

by Colonel Stephen P. Perkins and Lieutenant Colonel John D. Jackson, II, USAR

The views expressed in this article are those of the authors and do not necessarily represent the official policy or position of U.S. Joint Forces Command, the Department of Defense, and the U.S. Government.

"Let it be said that combatant commanders...don't fight with Army systems or Navy systems or Air Force systems; what they want to do is fight with joint systems. They have to take all of the capabilities, not the ones that one Service recommends, but all of them, and make them rational and coherent, and then be capable of putting power on a specific target in a specific way."

—Secretary of Defense Donald Rumsfeld,
31 January 2002

For more than a decade, a change in the view of operations has been taking shape. Like Joint operations, Effects-Based Operations as an expeditionary warfare concept has also been evolving, and is now making its way into discussion, experimentation, and joint doctrine. Arguably, the first Gulf War was the first use of effects-based operations by an expeditionary force. Two measures of performance for the "air campaign" during Operation DESERT STORM were the attrition of the second echelon

tion achieved these effects, the ground operation could start. The effectiveness of the air operation on Iraqi forces was measured through the use of battle damage assessment (BDA) with additional strike missions planned based on this feedback. Since then, great improvements in intelligence collection and "systems of systems" analysis has led to an even greater understanding of the use and efficiency of effects-based operations.

The 2002 *Toward a Joint Warfighting Doctrine: Rapid Decisive Operations (RDO)* concept paper envisioned future operations as effects-based to allow forces to operate across the range (continuum) of military operations. The RDO concept identified four key characteristics for future joint operations (see Figure 1). Further, it described the military element of an effects-based campaign against the backdrop of the application of the national instruments of power.¹ Emerging future concepts use the future joint operations characteristics as a foundation for Effects-Based Operations.

Intelligence support to effects-based operations (EBO) is a critical component of a successful effects-based campaign. Intelligence is not only to

determine the centers of gravity (COGs) in the adversary's system of systems, but also to determine how well the effects are disrupting the adversary's systems at the strategic, operational, and tactical levels. Finding and understanding the

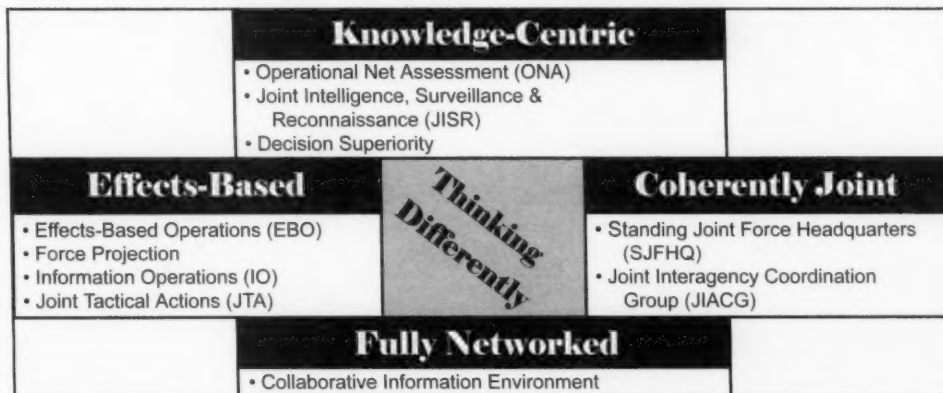


Figure 1. Key Characteristics for Future Joint Operations.

forces, mainly the Republican Guard and Iraqi armor and mechanized units, and the isolation of the Kuwaiti theater of operations by destroying the Tigris and Euphrates River bridges. Once the coali-

causal links in the adversary's systems and measuring the effectiveness of disrupting those systems will be new fields of analysis for intelligence professionals as well as new responsibilities.

Effects-Based Operations (EBOs)

"... the conditions that we want to establish are...where our joint and combined forces can conduct coherently joint and combined effects-based operations across the full range of military operations, where the scope, speed and richness of operational knowledge can quickly lead to precision decisions."

—Admiral Edmund P. Giambastiani, U.S. Navy,
5 February 2004²

Currently, the definition of "EBO" focuses on the actions that change the state of a system to achieve directed policy aims using the integrated application of selected instruments of national power—diplomatic, informational, military, and economic (DIME). In other words, we direct our DIME actions against the adversary's political, military, economic, social, informational, and infrastructure (PMESII) systems to achieve the desired effects, thus obtaining our national goals and objectives through the use of an effects-oriented campaign plan. To accomplish this, the EBO concept has four components:

- ☐ Knowledge superiority.
- ☐ Effects-based planning process.
- ☐ Dynamic and adaptive execution.
- ☐ Accurate, timely effects assessment.

Each of these components has a prototype or process in some stage of development to support the use of EBO at a joint task force-level in a regional combatant command.

Intelligence support to EBO requires our analysts to be more knowledgeable in "system of systems" analysis. Additionally, our analysts must develop "seasoned" expertise, gained through experience over the full spectrum of military operations and the current and future environments. The Joint National Training Capability and its corresponding Joint Intelligence National Training Capability (JINTC), combined with commander emphasis on analyst training, offers us the possibility of increased experience in less time than we currently use (see Figure 2).

The U.S. Joint Forces Command (JFCOM) Regional Joint Intelligence Training Facility (RJITF), working in conjunction with the Joint Warfighting Center and the Joint Military Intelligence Training Center, can develop EBO training and courses that support the four EBO components and other future supporting concepts. Recent partnering between JFCOM and the U.S. Army Intelligence Center and Fort Huachuca resulted in increased joint training at USAIC&FH—the Joint Intelligence Combat Training Center (JI-CTC). The JI-CTC allows the joint Intelligence Community the ability to leverage resources in live, constructive, and virtual environments. It could be a critical piece of the JINTC.³

Knowledge Superiority

"Information is the raw material of the intelligence business and we must find ways to extract additional value from what is currently available while at the same time harvesting and exploiting new and nontraditional sources of data."

—Rear Admiral Lowell E. Jacoby, U.S. Navy,
17 October 2002⁴

To support an effects-based approach requires the ability to develop a knowledge advantage sufficient to enable precise and bold action through battlespace understanding and situational aware-

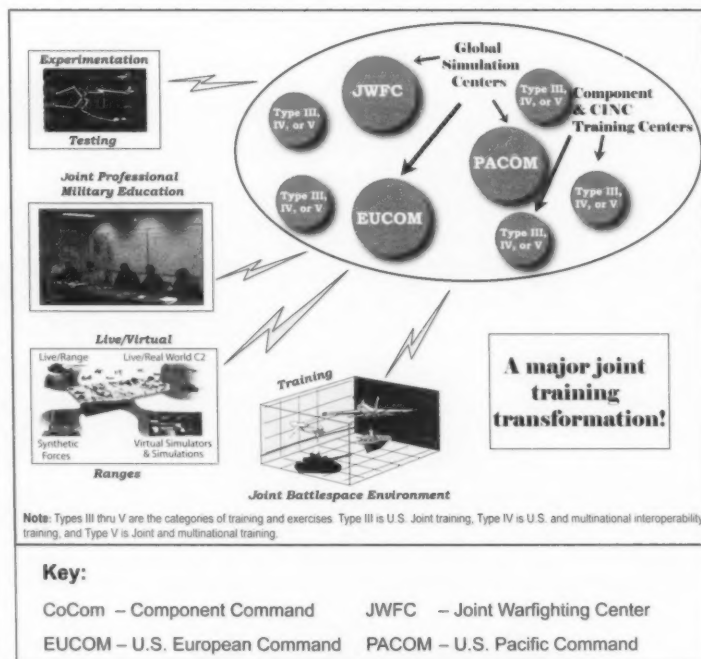


Figure 2. Joint National Training Capability.

ness.⁵ Battlespace understanding means that we must have detailed knowledge of how the enemy operates at all levels. Operational Net Assessment is the product and process used and developed to assist with battlespace understanding. Situational awareness, on the other hand, implies a tailored or relevant snapshot of the battlespace at a specific moment. The relevant common operational picture (COP) and joint intelligence, surveillance, and reconnaissance (JISR) system support situational awareness.

Operational Net Assessment

Effects-Based Operations and its enabling concepts and technologies all require detailed knowledge of the adversary's political, military, economic, social, informational, and infrastructure (PMESII) systems. Commanders and their staffs need to have as complete an understanding of the adversary as we can possibly collect and process. We form our understanding based on the intelligence, surveillance, and reconnaissance (ISR) picture our resources can collect. Understanding the adversary leads to identifying COGs that allow us to apply effects to influence the adversary's behavior and/or capabilities, thereby facilitating his culmination. By understanding ourselves, we protect our COGs and prevent disruption of friendly operations.

The Operational Net Assessment⁶ is the integration of people, processes, and tools that use multiple information sources and collaborative analysis to build shared knowledge of the adversary, the environment, and ourselves (see Figure 3).⁷ While this reads a lot like joint intelligence preparation of the battlespace (JIPB), ONA might be viewed as an expansion of JIPB to include all elements of national power as well as to enable EBO. Additionally, coalition partners must also be involved in ONA to add their elements of national power to the EBO. The all-source intelligence analyst by

necessity must become more knowledgeable of more than just military systems and trends. Political, economic, social, and informational trends and analysis will likely become new areas of study for military intelligence analysts.

ONA analysts look at the adversary's systems as a "system of systems." We usually think of these systems as links and nodes. The nodes are usually people, places, or things. The links are most often causal or supporting relationships between the nodes in a system; it maybe best to think of the links as inputs and outputs. Ultimately, the analyst looks closely at the nodes and the links between each node in each of the PMESII systems as well as the nodes and links common to the overarching PMESII system to identify COGs and critical nodes and links. The analyst also looks closely at the friendly environment to identify its COGs and critical nodes and links. Later in the planning process, the commander will use this information to support the decisionmaking process as well as to achieve the objectives of the strategic and operational campaign plans using effects-based planning.

The development and use of the ONA is an area where intelligence officers need to focus their atten-

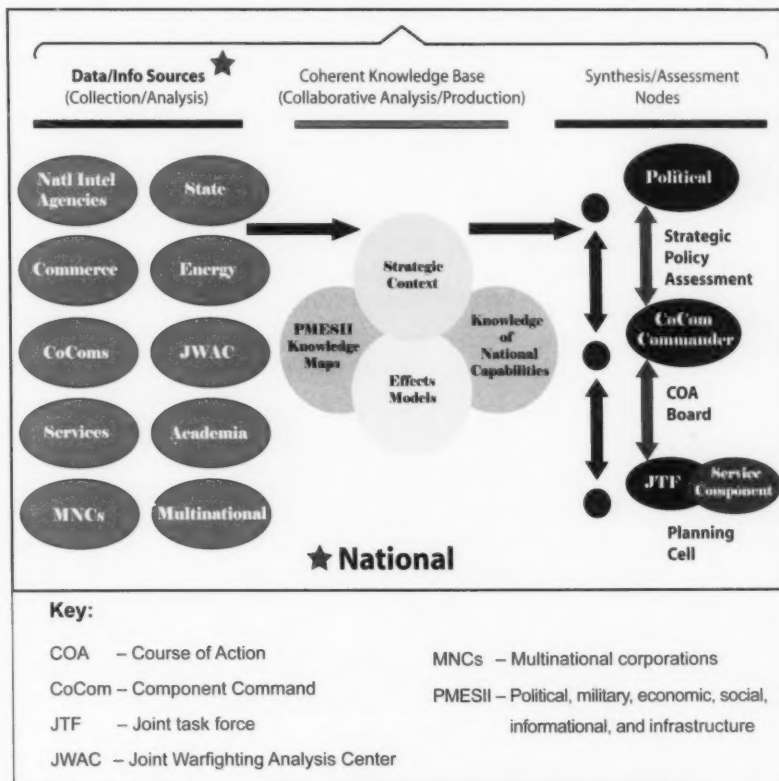


Figure 3. ONA Facilitates Decision Excellence.

tion. We need to understand how an ONA is developed, potentially assist other nonmilitary agencies in developing databases and analytical methods, as well as identify and understand shortcomings in the process and ONA concept. ONA will most likely not have all the data we need—as if we ever have all the data we think we need—but it is an evolutionary step forward toward a holistic approach to understanding and analyzing the threat.

Joint Intelligence, Surveillance, and Reconnaissance (JISR)

The intent of JISR is to assist intelligence operations by integrating assets, capabilities, and products from all Services into a COP enabling centralized control of collection resources from national and Service systems. Moreover, JISR becomes an interrelated process to battlespace understanding and situational awareness, and ultimately a feedback mechanism for effects-based planning and synchronization. The JISR as a supporting prototype to situational awareness allows commanders and staffs to better understand the ONA at any time during the operation, as well as how the adversary might react to various effects employed by joint forces. By managing real-time ISR collection, JISR helps fill the gaps in ONA, and assists in determining “how well” the EBO is preceding. The commander can then decide if and how the operation needs adjustment to achieve the objectives.

Effects-Planning Process

“We would not apply overwhelming force. Rather, we would apply the overwhelming ‘mass of effect’ of a smaller force. Speed would represent a mass all its own.”

—General Tommy Franks, (U.S. Army, Retired)
American Soldier⁶

The goal of the effects-planning process is an effects-based campaign plan that connects strategic goals and tactical actions in a synchronized flow of effects that accomplish the desired end state. It would therefore follow that there are strategic, operational, and tactical effects with a corresponding desired change in the adversary's behavior at each level. We use strategic effects to change the adversary's behavior at the national level, as evidenced by the removal of Slobodan Milosevic as the head of the Serbian Government. The intention of operational effects is to change the adversary's ability to operate in an effective and efficient man-

ner, like using a broad frontage of attack to destroy the Iraqis' ability to establish an effective defense of Baghdad in Operation IRAQI FREEDOM (OIF). Tactical effects would affect the adversary's employment of key systems, like denying the Iraqis' the use of their integrated air defense system at the start of Operation DESERT STORM.

With our previous operational concepts, we emphasized a physical superiority of at least three-to-one before engaging the adversary. In an EBO, the emphasis will be on understanding how the adversary's systems operate, where his COGs are and what effect we want to achieve. When supported by an accurate understanding of the current situation, we can more precisely apply our capabilities to achieve the greatest possible effect on the adversary's systems. Our focus on precision will reduce but not eliminate the physical force needed to achieve the intended results.

Collaborative Information Environment

In their time, drums, flags, and radios have been evolutionary advances in communication technology. Today, the collaborative information environment (CIE) is an evolution of our communications system. Where use of drums, flags, and radios had been mainly to disseminate orders or report changes in the conduct of the campaign, we use CIE to share information and develop synchronized campaigns or operations plans. In the future, the CIE will become the standard method of communication between commanders and staffs, up, down, and throughout the chain of command and be the lynchpin for developing effects-based campaign plans.

Essentially, the CIE will be an enabling technology for distributed staffs, joint and coalition. The goal of the tools that comprise CIE is the clear communication of ideas, concepts, and orders as concisely and efficiently as possible, as well as the information needed to develop them. The CIE will enable the information paradigm shift away from “need to know” to “need to share” (see Figure 4).

The CIE exists today at JFCOM, and is undergoing installation at other regional combatant commands as well as at least one other government agency. Developed from a combination of video, audio, and whiteboard-like applications available to most users

on the Internet, CIE is not perfect but it is useable if not completely scalable. In the future, CIE will be a much more integrated package of tools that can easily scale to a thousand users, and will electronically co-locate staffers spread over the globe and integrate with our coalition partners.

Dynamic and Adaptive in Execution

"Putting together information about where the enemy is and discovering what the really important targets are still represent daunting challenges in a complex, ambiguous environment. Battle damage assessment, even in the case of precision weapons, remains, an intractable problem for both air and ground forces."

—The Iraqi War: A Military History⁹

The components and defense and non-defense agencies support each other and the effects-based campaign plan with the unique capabilities each brings to the operation. Joint forces, including government agencies, which can communicate,

members and, in some cases, nongovernmental agencies if it is a military operation other than war (MOOTW).

For intelligence officers and analysts, the JTF staff will develop, update, or refine the ONA, and determine the effectiveness of the effects-based campaign or operations plan. The intelligence staff must be ready to identify changes in the system and quickly reinforce or mitigate effects as needed. Recent operations suggest that the intelligence staff will be human-resource constrained, so all members must be competent at all critical tasks.

Standing Joint Force Headquarters – Core Element (SJFHQ-CE)

Recent military experiments such as Millennium Challenge 2002 and military operations made it apparent that combatant commanders need an organization capable of providing timely pre-crisis information in situation development, mission

planning, and course of action development as well as evaluating and preparing host-nation support. With this objective, JFCOM proposed and the Department of Defense (DOD) implemented an SJFHQ-CE¹⁰ initiative that allows combatant commanders the flexibility of having a permanent JTF headquarters to conduct joint operations. Tailored to be immediately responsive by having already established links into the appropriate resources, the SJFHQ-CE will guar-

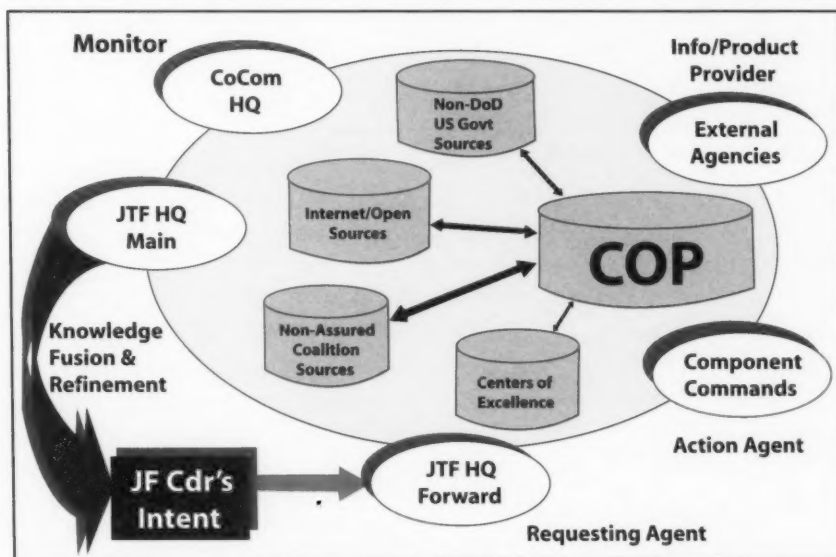


Figure 4. The Collaborative Information Environment.

quickly assemble, collaborate, and synchronize their actions on objectives, are crucial to effects-based operations.

The JTF staff is critical to dynamic and adaptive execution, and is not limited to military staff members, but also includes other nonmilitary government agencies. As a staff, this team must train and be ready to work together to act and react quickly to a battlespace in flux. At some point during the operation, the joint staff will include coalition

members and, in some cases, nongovernmental agencies if it is a military operation other than war (MOOTW).

For intelligence officers and analysts, the JTF staff will develop, update, or refine the ONA, and determine the effectiveness of the effects-based campaign or operations plan. The intelligence staff must be ready to identify changes in the system and quickly reinforce or mitigate effects as needed. Recent operations suggest that the intelligence staff will be human-resource constrained, so all members must be competent at all critical tasks.

Permanent staffed with joint personnel, the SJFHQ-CE is under the direction of a flag or general officer. The SJFHQ-CE coordinates with other combatant command staff elements, and develops and analyzes potential contingency operations, which

leads to the creation of the ONA. This concept enables seamless planning during any pre-crisis situation and improves their understanding of the enemy as well as friendly forces. Additionally, the SJFHQ-CE will standardize all key enabling concepts involved in EBOs and Expeditionary Warfare.

There is a significant requirement for the theater joint intelligence center to provide intelligence products and support to the SJFHQ-CE. Use of a common information environment allows the sharing of data and the ability to leverage national, interagency, academia, and industry expertise. The

knowledge management cell within the SJFHQ-CE is critical to this effort.

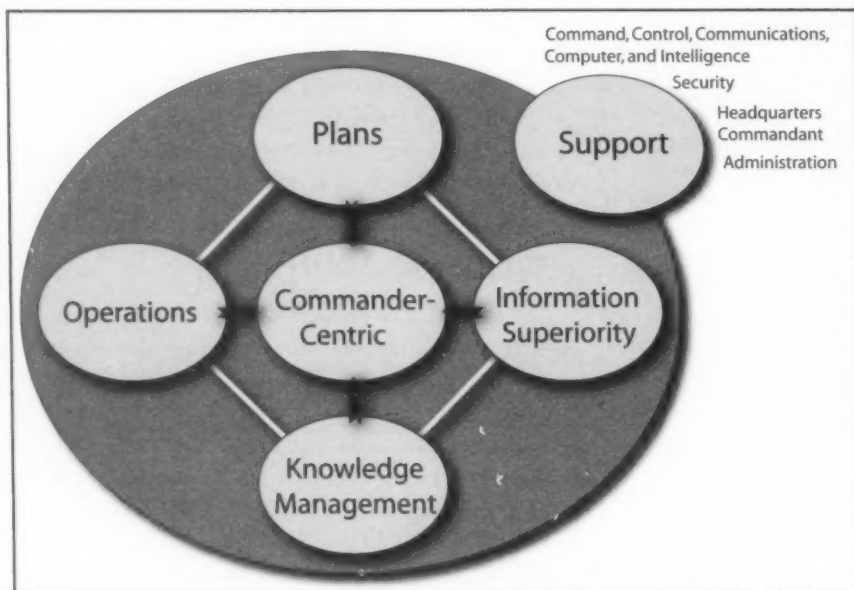


Figure 5. SJFHQ-CE Component Interaction.

In keeping with its flexible design, the SJFHQ-CE may serve as the core of a JTF headquarters or it may support a component or other headquarters designated as a JTF. Furthermore, it can directly support a combatant command headquarters or serve as its forward element when it functions as the Joint Force Commander. Currently, U.S. Central Command (CENTCOM) is using an SJFHQ-CE and all Combatant Commanders are directed to have an SJFHQ-CE operational by fiscal year 2005.

The design of the SJFHQ-CE offers unique opportunities for the intelligence functional area (see Figure 5). Specifically, like the other parts of the SJFHQ-CE, intelligence is **not** represented as a staff section (normally referred to as a J-code, i.e., J2 or J2X). There are, however, numerous intelligence professionals spread out in the operations, plans, and information superiority cells. The intelligence supervisor in the information superiority cell can act as the de facto J2 for the SJFHQ-CE. Based on the reach back to the combatant command staff, the command's J2 is a more appropriate manager of the intelligence func-

tion. There is a significant requirement for the theater joint intelligence center to provide intelligence products and support to the SJFHQ-CE. Use of a common information environment allows the sharing of data and the ability to leverage national, interagency, academia, and industry expertise. The

Joint Interagency Coordination Group (JIACG)

In the past, government agencies have been a part of the war effort, especially after hostilities had started. In EBO, the JIACG representatives will be deeply involved in the development of strategic and effects-based operational planning. These agencies will bring insight into the nonmilitary aspects of the adversary and the

ability to synchronize the nonmilitary elements of national power to the planning team. The intent is for civil government agencies to achieve our national goals without resorting to applying the military aspect of national power in full force.

The goal of the JIACG is to understand completely the adversary's systems of systems—PMESII using all the information available to us. The nonmilitary government agencies like the Central Intelligence Agency and Departments of State, Justice, and Treasury help fill in the gaps in ONA so we can apply our elements of national power (DIME) to affect the PMESII systems in a way to end hostilities or achieve our national goals quickly and decisively. This group and their expertise bring our joint force closer to the coherently joint capabilities-based joint force required by the President, Secretary of Defense, and our nation.

To defeat the adversary quickly and decisively using effects-based planning and operations requires synchronization of all the elements of national power. Three of these elements have nothing

to do with the military and more than one agency may actually wield some of them. The military may possibly have to assist the nonmilitary agencies in understanding and developing synchronization methods and coordination processes to aid effects-based planning, operations, and metrics.

Accurate and Timely Assessment

"If it is difficult to calculate one's own strength, then how much more difficult is it to calculate the strengths of others whose culture, language, and nationality are so different?"

—Calculations: Net Assessment and the Coming of World War II¹¹

Expeditionary Warfare. As the saying goes (with a slight spin), amateurs talk tactics, while professionals talk integration of capabilities e.g., (logistics). Effects-Based Operations and Expeditionary Warfare will most likely be resource-constrained, either by the rules of engagement or especially in the kinetic weapons resources generally used to achieve desired effects. Therefore, commanders will need to use limited resources effectively by not attacking a target more than is necessary to achieve the desired effect or develop, practice, and use nonkinetic weapons in creative ways to achieve the same effect.

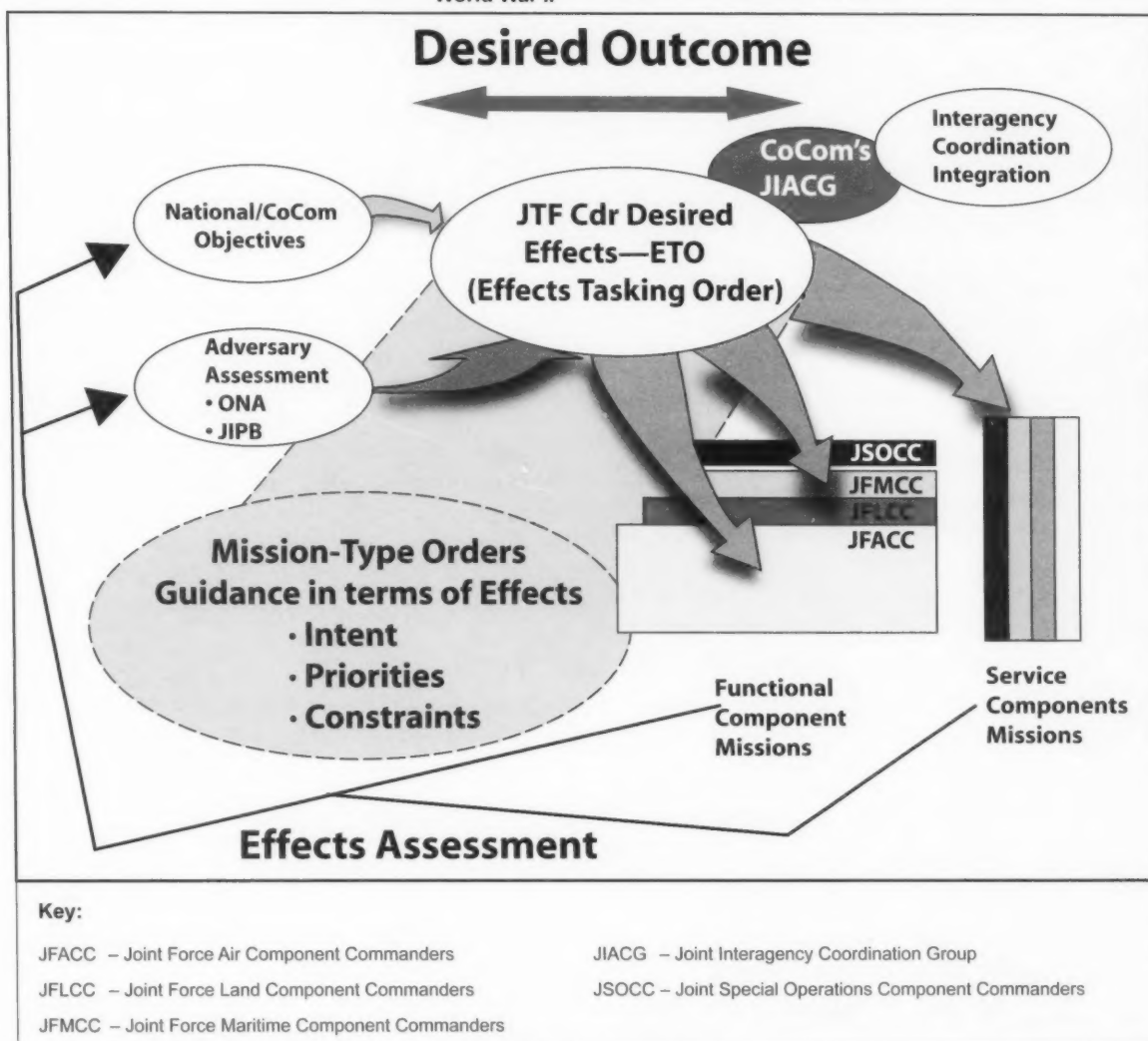


Figure 6. Effects-Based Process.

The accurate and timely assessment of effects accomplishment is an essential element in EBO and

Assessment of effects implies effects must be empirically measurable as well as attributable to

achieving the desired results (see Figure 6). The intelligence function will be an essential component, if not the collector and evaluator of the success of effects on the adversary's systems of systems. An ONA that is as complete as possible and enabled by a thorough understanding of PMESII and its nodes and links is critical to warfighter success. Our elements of national power will "target" cause and effects aspect of the adversary's systems to affect them in a way that supports our national goals. It will likely take multiple "targeting" of the causal links to achieve our goals, so we must develop a method to report the level of effectiveness reached at any given moment.

Most likely, our actions will have second and third order effects on PMESII systems, some of these effects we will be able to foresee, others will have unintended negative consequences, and still others will have unintended positive consequences. We must learn to predict these second-, third-, and higher-order effects. Further, we must have effective processes and procedures to mitigate unintended negative effects and take advantage of unintended positive effects.

Leveraging unintended advantageous effects may be an area where information operations (IO) can have significant utility as a nonkinetic weapon in effects-based operations. With a sound and synchronized IO plan, we can reinforce and perhaps amplify intended effects with a thorough understanding of the adversary's PMESII systems as well as reduce the undesired effects caused by the inevitable accidents and imprecise application of national power.

Conclusion

Effects-Based Operations is a concept developed from examining a problem, defining a condition, and proposing a solution. For EBO, the problem is the strategic requirement, the condition is the operational environment, and the solution is a vision of future warfare. EBO is new, but rooted in observation and lessons learned from the past twelve years of operations that our forces have deployed to and worked with other government agencies and coalition forces.

What this article has covered is at best a primer to Effects-Based Operations. We hope that this ar-

ticle will stimulate you enough to investigate EBO, and the supporting prototypes and processes. Joint warfare and the Joint Forces Command are the future; as intelligence professionals we should continually monitor what our force is conceiving, testing, and evolving so we can better prepare for the future.

As a part of the joint JFCOM-CENTCOM effort, Admiral (ADM) E.P. Giambastiani (Commander, JFCOM and Supreme Allied Commander for Transformation) noted that intelligence capabilities during OIF needed enhancement. Additionally, ADM Giambastiani provides us a valuable insight from OIF, "*Warfighters don't care where capabilities come from—they just care that they are responsive, integrated and effective.*"¹² The challenge for the joint Intelligence Community, and its national Intelligence Community brethren as well, is to develop the capabilities required of EBO and Expeditionary Warfare. Further, the Iraqi campaign reinforced the lesson that quality trumps quantity on most modern battlefields.¹³ Joint Forces Command, the Services, and the Defense agencies must work together to develop that quality in this complex, ambiguous environment. The Joint Forces Command provides an excellent environment for examining future concepts through joint experiments, joint training exercises, and the fielding of lessons learned solutions to participants in the Global War on Terrorism.



Endnotes

1. U.S. Joint Forces Command, *Toward a Joint Warfighting Doctrine: Rapid Decisive Operations*, J9 Joint Futures Lab, 18 July 2002, pages vii-viii.
2. Giambastiani, Edmund P., Admiral, U.S. Navy, "Born Joint," *CHIPS Magazine*, Spring 2004, page 8. Text edited from remarks given at Armed Forces Communications and Electronics Association (AFCEA) West, 5 February 2004. This document is available at http://www.chips.navy.mil/archives/04_spring/Web_Pages/Born_Joint.htm.
3. Cubillo, Frank, Colonel, U.S. Marine Corps, Deputy Director of Intelligence Operations, JFCOM, interview by COL Perkins, 13 May 2004 in Suffolk, Virginia.
4. Jacoby, Lowell E., Rear ADM, U.S. Navy, Statement for the Record to the Senate Armed Services Committee, 17 October 2002, page 1.

5. U.S. Joint Forces Command Joint Concept Development and Experimentation's *Concept Primer*, "Effects-Based Operations (EBO)", U.S. Joint Forces Command Public Affairs Office, November 2003, page 3.

6. For more information on ONA, see the U.S. Joint Forces Command Joint Warfighting Center (JWFC) Joint Doctrine Series Pamphlet 4, "Doctrinal Implications of Operational Net Assessment (ONA)," dated 24 February 2004.

7. U.S. Joint Forces Command, *Toward a Joint Warfighting Doctrine: Rapid Decisive Operations*, page x.

8. Franks, Tommy, General (GEN), U.S. Army, **American Soldier** (New York, NY: Regan Books, 2004), page 416.

9. Murray, Williamson, and Scales, Robert H. (MG, U.S. Army, Retired), **The Iraq War: A Military History** (Cambridge, MA: The Belknap Press of Harvard University, 2003), page 243.

10. For more information on the SJFHQ, see the JWFC Joint Doctrine Series Pamphlet 3 "Doctrinal Implications of the Standing Joint Force Headquarters (SJFHQ)," dated 16 June 2003 at <http://jwfc.jfcom.mil>.

11. Murray, Williamson, and Millett, Allan R., Editors, **Calculations: Net Assessment and the Coming of World War II** (New York, NY: The Free Press, 1992), page 4.

12. Giambastiani, page 7.

13. Murray and Scales, page 249.

Colonel Stephen Perkins is the Director of Operations (J3) of the Joint Information Operations Center. He was

the Deputy Director for Intelligence Operations (J23) and the J2X, U.S. Joint Forces Command, Norfolk, Virginia. COL Perkins received a Bachelor of Science (BS) degree from Cameron University, in Lawton, Oklahoma, and Masters degrees from Auburn University and the Army War College; he is a graduate of the Air Command and Staff College and the Army War College's Advanced Strategic Art Program. He has held command and staff intelligence assignments including Company Commander, 1st Battalion, 14th Infantry; S2, 2d Brigade, 101st Airborne Division (Air Assault); and Commander, 103d MI Battalion. Readers may contact COL Perkins via E-mail at stephen.p.perkins@us.army.mil and by telephone at (210) 977-2911 or DSN 969-2911.

Lieutenant Colonel John Jackson is a U.S. Army Reservist (USAR) assigned to the Army Element of the Joint Reserve Unit at U.S. Joint Forces Command (JFCOM). He is currently a staff officer in the Operations Division (J23) of the J2, JFCOM, and a contract employee in Virginia. He received a BS degree from the University of Wisconsin at Milwaukee. LTC Jackson has had assignments with the 319th MI Battalion and 525th MI Brigade, the 204th MI Battalion, U.S. Central Command (Operations DESERT SHIELD and DESERT STORM), and 32d Separate Infantry Brigade (Mechanized) in the Wisconsin Army National Guard. Readers may contact LTC Jackson via E-mail at john.dale.jackson@us.army.mil and by telephone at (703) 923-2146.

Time for Subscription Renewal?

If you notice a "#" or "*" in the address block on the back cover or the mailing label, then it is time to renew your subscription. The "#" means you have one more issue coming, the "*" means that this is your last issue. You can renew either by calling us at (520) 538-1009 or DSN 879-1009 (with a credit card handy) or by sending us the completed subscription form on page 4. If you wish to keep this issue intact, you may make a photocopy of the form and mail or fax it to us (see page 80).

Read Any Good Books Lately?

We welcome reviews of books related to intelligence professional development or military history. Please E-mail or mail your book reviews with your phone number, address, the title, author, publisher, price, number of pages, and the publisher's address (listed on the book's copyright page). Please send your reviews to mipb@hua.army.mil or mail them to ATTN: ATZS-FDT-M USAIC & Fort Huachuca, 550 Cibique Street, Fort Huachuca, AZ 85613-7017.

Overview of Joint STARS:



Capabilities and Employment

by Captain Charles L. Hiter

As intelligence professionals you may find yourselves assigned as the collection manager of a maneuver task force (TF). This article will give you some insight in how we employ the E-8C Joint Surveillance Target Attack Radar System (Joint STARS) aircraft better in mission planning, collection operations, and maneuver operations, making it a combat multiplier for the commander. The article will provide a general overview of the E-8C Joint STARS capabilities, pre-mission tasking and planning, and two employment scenarios, one supporting pre-mission collection operations and the other supporting maneuver operations.

Aircraft and System Capabilities

The E-8C is a refurbished, air-refuelable Boeing 707 with a crew of 22 to 38. The aircraft is equipped with a powerful side-looking multimode radar and 24-foot long antenna mounted under the forward fuselage of the E-8C. The operating and control subsystem of the E-8C uses commercial-off-the-shelf (COTS) computers for data processing. The 18 operator workstations control the radar and integrate the radar's information with information from a variety of on- and off-board databases. Connectivity is provided by a communications subsystem that this article will discuss later.

The field of view of the Joint STARS radar extends perpendicularly from the aircraft's flight path from 80 kilometers to 250 kilometers and at a 60-degree angle from center of the radar. The radar can either maintain a field of view that moves in relationship to the

aircraft's flight path (radar reference coverage area) or provide constant surveillance of a specific area (ground-reference coverage area [GRCA]).

In both types of surveillance the radar can provide wide-area moving target indicator (MTI) coverage. In its MTI mode, the Joint STARS radar can—in all weather and during limited visibility—detect, locate, and track surface vehicles as small as motorcycles and jet skis moving at speeds less than ten kilometers per hour. It can also “see” slow, low-flying aircraft like helicopters. With this MTI performance it is possible to determine a convoy's size, speed, and direction; locate and identify potential choke points; determine if a bridge is operational; and, through analysis, locate assembly areas and command centers.

Locating and identifying many of these items requires MTI analysis by aircrew members or ground analysts in the Common Ground Station (CGS) where they integrate information on movement with other sources of information. Normally, either the Army airborne target surveillance specialists (military occupational specialty 96H), or the Airborne Operation Technicians, enlisted Airmen trained as trackers, do the onboard analysis. The radar cannot identify vehicle types, track personnel, track missiles or rockets, or see through buildings, mountains, or hills.

The onboard Sensor Management Officer (SMO) coordinates the surveillance plan to ensure a radar service rate that provides quality MTIs. (How often the radar provides surveillance of the specified surveillance areas defines the radar service rate.) The

SMO sets the priority and frequency of revisit for the different radar surveillance requests during preflight operations and may change them during flight.

After coordination, the SMO usually places a GRCA over the priority surveillance area. Other common radar service requests (RSRs) are synthetic aperture radar/fixed target indicator (SAR/FTI) and sector searches. The SAR/FTI provides a National Radar Interpretation Scale (NRIS) of 3 or 4 radar image resolution. These images are sent in near-real time (NRT) to the CGS or Joint STARS Workstation (JSWS) for ground interpretation and exploitation. The SAR/FTI assists in refining the accuracy of a track, locating stationary vehicles, and supporting limited battle damage assessment (BDA). It cannot identify vehicles, detect surface-to-surface missiles (SSMs), or build large mosaic images. The sector search is another wide-area surveillance (WAS) request that you can use for areas outside the GRCA. The best use of the sector search is for an area smaller than the GRCA and when a faster radar revisit rate is required for tracking.

The onboard crew has the ability to monitor the MTI through their operator workstations. The displays allow them to view an operational picture uploaded before takeoff that includes friendly and enemy locations, graphic control measures, and NRT battlefield intelligence updates. Using data provided by different ground liaisons, the Mission Planning Team manually loads the data. The operators can update this data throughout

the flight through manual inputs and deletions. They have the ability to view computerized maps as underlays and use the historical playback function. As in the CGS, the E-8C crew is capable of setting the playback function to create a better picture of movement for analysis and tracking. They are able to visualize movement through the "worm" effect of the historical MTI dots on the graphic display and can manipulate the replay rate to add fidelity to the tracks. The operators also have the ability to view specific periods of time in the MTI history. The best use of this option is to identify the point of origin of a track picked up by an outside agency and passed to the Joint STARS crew. An example of this would be to identify where a ballistic missile launcher moved within the current surveillance area once the mission crew received the launch location.

The communications system of the E-8C gives the mission crewmember the ability to monitor five external radios. The airplane has two high frequency (HF), twelve ultrahigh frequency (UHF), three very-high frequency (VHF), and two satellite communications (SATCOM) radios as well as one Single Channel Ground and Airborne Radio System (SINCGARS)-capable radio. The mission crew can configure both of the SATCOM radios for voice or one for each voice and data. The SATCOM datalink provides linkage to the JSWSs or the CGSs that do not have line of sight to the Joint STARS aircraft. Key to understanding the current E-8C SATCOM capabilities is that the jet cannot conduct two different

SATCOM datalinks simultaneously. In addition, if the mission crew must monitor two SATCOM voice channels, then they are not able to provide any SATCOM datalink.

The E-8C has the ability to send potential threat data to the AH-64 D (Longbow); however, only seven of the Joint STARS aircraft currently have this capability through a Personal Computer-

All photos are provided courtesy of 116ACW Public Affairs.



The Ops Section on the Joint STARS aircraft includes (left to right) the Air Force Senior Director, the Army Deputy Mission Crew Commander, and the two Air Battle Managers.

Improved Data Modem (PC-IDM). As the other E-8C aircraft go through their maintenance cycle, they will have the IDM capability installed. This direct sensor-to-shooter datalink is an inherent capability with the Longbow helicopter units and an added capability for the Joint STARS aircraft and CGSs. It is possible to connect to the Longbows with UHF, VHF-frequency modulation (FM), or the FM-frequency hopping capability, through SINCGARS radio. The link options require significant coordination before the mission to ensure the proper configuration of the hardware and software aboard the aircraft.

With PC-IDM, a commander can use the tracking done aboard the aircraft to either forewarn advancing helicopters of potential threats or direct the Longbows to investigate movement along their route. This sensor-to-shooter link provides the Longbow pilots with a digital picture of what the Joint STARS is detecting and tracking in their assigned priority fire zones. The tactical application of the link is to surveil the Longbow's ingress route, attack by fire position, and provide a final picture of the objective area to confirm target locations in the objective areas before the helicopter exposes itself. Longbow units and ground commanders need to understand that although this capability exists, the training and real-world uses have been limited. Tactics, techniques, and procedures (TTPs) are under development through coordination with the 21st Cavalry Brigade at Fort Hood, Texas.

Employment Considerations and Techniques

The mission of the aircraft—as stated in the March 2003 Air Land Sea Application (ALSA) Center Publi-

cation **Multi-Service Tactics, Techniques, and Procedures for the Joint STARS**—is to perform theater battle management and intelligence, surveillance, and reconnaissance (ISR) support missions. It does this through providing radar WAS MTIs and SAR in support of ground operations, as well as supporting the Air Component Commander's (ACC) fixed-wing attack operations and targeting for air interdiction (AI) and close air support (CAS).

Requests for Joint STARS missions can originate from any headquarters and the request formats vary by theater AO. All of these requests will be input into the theater intelligence-synchronization plan through the maneuver unit collection requests. The collection priorities are coordinated and deconflicted with the collection managers of subordinate ground maneuver task forces (TFs) and the ISR Cell within the Air Operations Center (AOC). During these meetings, the maneuver headquarters and AOC ISR Cell are able to coordinate for specific coverage in support of their intelligence synchronization plans or other ad hoc requests sent to higher headquarters. The AOC will publish the specific ISR tasking to the Joint STARS and publish it in the Air Tasking Order (ATO), usually 72 hours before the mission.

The Joint STARS mission planning team or mission crew (or both) will receive the tasking and conduct flight mission planning. During this deliberate planning process, the SMO will develop a radar surveillance plan to support the tasking. If areas of the tasking cannot be covered due to terrain or excessive radar revisit times, the mission planning team will "alibi" the areas that the platform cannot cover. The deputy

mission crew commander (DMCC), an Army officer, ensures that the developed surveillance plan is in accordance with the ground commander's intent and priority intelligence requirements (PIRs). The DMCC is integral in facilitating the Air Force crewmembers' understanding of the ground commander's requests, and relays to the ground any requests for information from the mis-



E-8C Joint STARS in flight over 116th Air Control Wing parking ramp and garrison at Robins Air Force Base, Georgia.

sion planning team through the collection manager or while in flight to the CGS.

Intelligence and Operational Preparation

During the mission planning and intelligence preparation of the battlefield (IPB) phases of an operation, the unit should exploit the full ISR capabilities of the Joint STARS aircraft. As the CGS crews identify track patterns developing, they should forward requests for SAR/FTI to the aircraft via the Surveillance and Control Datalink (SCDL). This information should also be used to cross-cue other assets to gain more fidelity. A common cross-cue for the Joint STARS is by signals intelligence (SIGINT) reports, as well as real-time imagery platforms such as unmanned aerial vehicles (UAVs). Collection managers need to understand that when they are covering the collection deck with multiple sensors, the MTIs and SAR data from the aircraft can serve as the initial cueing asset or the secondary cued asset. The real-time analysis of MTIs by the aircrew or the CGS operators may also result in a real-time SIGINT tasking to ground or airborne signals collectors as well. This real-time reporting will allow rapid target development in the intelligence support to targeting process. Analysis and correlation of MTI tracks with other sensors may identify routes used by threat forces for infiltration corridors. This data can then help to position other ISR assets in place to gain higher fidelity on the type of traffic for interdiction or to identify potential movement corridors for friendly units.

Scenario 1—Intelligence and Operational Preparation

Your TF is beginning to plan operations focused on interdicting threat forces conducting insurgent operations in the area of operations (AO). You have reviewed the PIRs and have a general intelligence estimate on where threat forces are originating, but you do not know their routes, assembly points, or objective areas. A review of the ISR assets available to provide support includes Joint STARS or you identify the requirement for WAS MTI to support your collection operations.

Task 1: Confirm or Deny Locations of Templated Assembly Areas and Infiltration Routes. As the collection manager or the intelligence plans officer, you have received a list of suspected assembly areas and potential infiltration routes and times. You should

initially identify in your intelligence synchronization plan if collectors should treat these potential targets as route named areas of interest or if they are emphasis points within area NAls. This information enables the mission crew to develop a surveillance plan that covers all of the NAls with the appropriate radar revisit rates. If you have several locations to surveil, the SMO will use a GRCA and then use a higher revisit surveillance request, like an Attack Planning (AP) Radar Request or Small-Area Target Classification (SATC) Radar Request, for confirmation of suspected activities within the GRCA. If there are one or two areas separated from the GRCA by high terrain or distance, the SMO may place a sector search over one area and the GRCA over the main surveillance area. This provides the radar a priority of surveillance and keeps the revisit rate(s) as low as possible, therefore allowing maximum quality of MTI for tracking.

The ability to use the radar for SAR imagery will also enable the ground imagery analyst to view a real-time image of suspected sites for confirmation of assembly areas as well as NRT change detection analysis of suspect locations. Although this SAR is at best a NRIS 3 radar image, it can provide this real-time exploitation capability to the TF.

Task 2: Identify Threat Infiltration Routes and Crossing Points into the TF AO. The ability to conduct this task directly relates to the terrain for the AO. Areas with high mountains or deep wadi (gully or wash) networks may adversely affect radar coverage. This could prevent the ability of the radar to place MTIs along suspected routes. It is likely that the mission crew will conduct an initial screening analysis on the ground to achieve the best possible orbit and then a detailed screening analysis while on orbit to identify the gaps in radar coverage. This information is critical to the collection manager in order to identify the best placement of other collection assets to cover the terrain.

There may also be other surveillance areas that are being covered and reported to the ground units. The AOC or the mission crew may identify these areas in support of other mission taskings. If the CGS linkage is via SCDL, they will receive MTI in real time. If the CGS linkage is via SATCOM data, then the MTI reports will go down through free text SALT (size/activity/location/time) reports and End of Mission Reports (EMRs) although it is possible to send these reports via voice, if the reporting is time-critical.



Air crew preparing for flight in a chemical environment.

These MTI and free text SALT reports will be sent to the TF intelligence support element (ISE) upon landing. There is not an established cell in the Air Force Joint STARS squadron to conduct comprehensive MTI analysis. The level of track reporting by both the aircraft and the CGS is what identifies the potential routes of infiltration, and helps cue the direction of other ISR assets available to the collection manager or ACE chief for confirmation. Providing the Army DMCC with your MTI analysis is critical in adjusting the surveillance plan to support the ground commander better.

Task 3: Limited Key Infrastructure Assessment. If the TF is looking at key infrastructure such as bridges or airfields as part of their operation, the Joint STARS can perform partial analysis through initial detection and change detection of these sites. It is possible to identify usage of a bridge or if an airfield had any large obstructions using both the SAR and MTI functions. Through change detection analysis of SARs and MTI movement, the ISE is able to conduct limited BDA of infrastructure. With high-quality SARs, it is sometimes possible using the SAR images and analysis at the ISE to identify where an adversary has emplaced wire obstacles and shallow minefields. Again, this is limited analysis and most likely best conducted by the TF ISE. In cases of unobserved obstacles, damaged bridges, or obstacle belts, this analysis can also help to identify the alternate routes vehicles are using.

Task 4: Support to Targeting. As already shown in the discussion of Tasks 1 and 2, the MTI allows

for identifying where movement is occurring and where it has stopped. Initial reporting of the locations where movement stopped may be critical in identifying potential ambush sites along planned friendly routes of movement. This reporting, when cross-cued with assets for positive identification, also supports the targeting phase of an operation. The identification of routes into the AO may be critical in identifying gaps in obstacles, such as berms or borders. A baseline data report provided based on MTIs will help create a movement pattern that is critical in identifying the rate and route of movement to facilitate better placement of interdiction assets at a specified target area of interest (TAI) or engagement area.

The ability of the air battle managers to assist in the employment of airpower is an added benefit to the targeting of a potential threat.

Well-defined reporting requirements are crucial to support IPB. It is necessary to clarify if the unit wants the mission crew to provide any specific reporting and tracking support or just MTI coverage of the surveillance area. The mission crew may also receive off-board reports of SIGINT or air reports and correlate them to movement on the ground. It is critical that the CGS maintains a good link with the mission crew to share ground reports for cross-cueing and situational awareness. The mission crew is not supporting the CGS correlation effort if they are tracking a friendly force when they should be looking for potential threats. Updating the crew on friendly movement throughout the surveillance area prevents this from happening.

Current Operations

The Joint STARS is a battlefield management system that can provide—in addition to the MTI surveillance mission—air control to assets as directed. During the maneuver phase of the operation, the commander and operations officer can use the real-time battlefield awareness provided by the JSWS and CGS remote workstation to position units dynamically to interdict or avoid potential threats. Not only does this assist in the commander's overall situational awareness in the close fight, it allows the ground commander to look at traffic patterns along or through NAIs beyond the organic assets and in multiple subordinate unit AOs. The MTI coverage of the Joint STARS not only

allows the ground commander to react to movement, the combination of MTI and SAR analysis is beneficial in determining if the enemy is preparing defenses and obstacles or dispersing. The situational awareness provided by Joint STARS will allow the commander to task other ISR assets to collect further information on these initial reports and maneuver forces to exploit any enemy weaknesses.

Scenario 2—Current Operations

Operations can range from major offensive Operations against organized threats to stability operations and support operations. The collection manager has listed Joint STARS as an asset available to support TF operations.

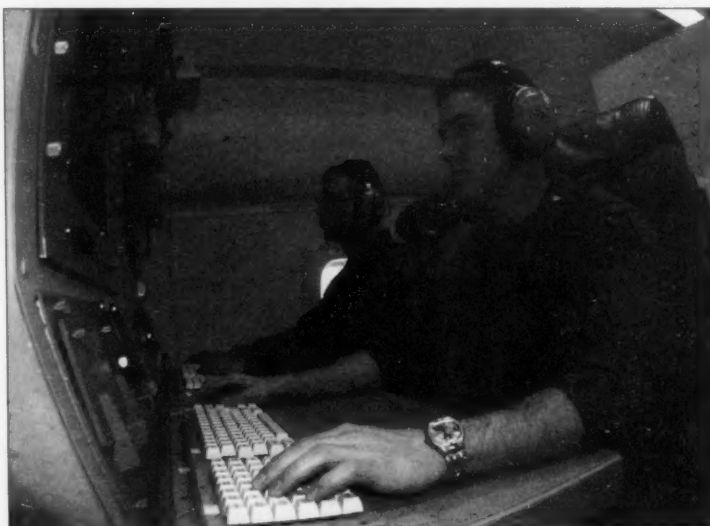
Task 1: Force Protection (FP). During many operations, small units (company size and smaller) move outside large defensive positions or ahead of a maneuver force in order to establish surveillance positions, ambush sites, or a presence of force in a contested AO. These units do not normally have any capabilities to see much farther than two to four kilometers around their position, especially during limited visibility. Some of these units have limited communications with their higher headquarters when put in these environments. The Joint STARS mission crew is capable of placing a medium- or high-resolution surveillance request over these positions to provide early warning of any movement within the surveillance area. The MTI reports go to the CGS at the TF headquarters and, if desired, the mission crew can contact the unit directly to provide voice reports of any potential vehicle movement in their area. The crew may also use this direct reporting method if an element is attempting to exfiltrate an area during low visibility and is trying to avoid any possible threats. The ability to overwatch the routes taken by these smaller units will assist in increasing their survivability on the battlefield.

Task 2: Movement Overwatch. Similar to the task of FP, overwatching the movement of mounted units can assist in providing a real-time report to the TF headquarters about any potential threats developing at choke points or along the planned routes for friendly maneuver. This real-time report allows commanders to change rates or direction of move-

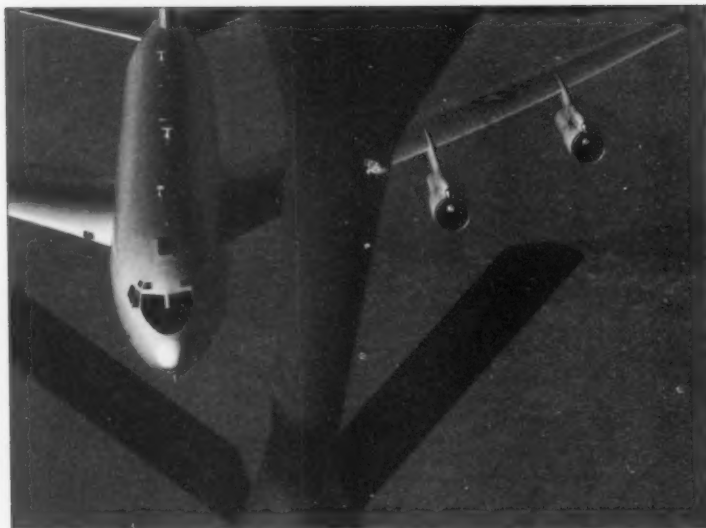
ments. This can also help in adjusting the maneuver units' movement formations to increase the survivability of the unit. When used with Longbow units, the improved data modem link can provide constant updates of potential threats along movement corridors, overwatch positions, and attack positions. By looking at NAIs deep in the TF AO, the Operations Center can use this early warning—beyond the capabilities of organic radar or ISR assets—in conjunction with the decision support matrix.

Task 3: Defensive Operations. Whether your unit is in a linear or area defense, the Joint STARS aircrew can provide real-time reporting throughout your AO. The first task that you should give to the aircrew is deep surveillance beyond organic ISR capabilities. They can monitor the NAIs and TAIs where you expect mounted movement to take place. Not only is the mission crew able to identify potential threats, they can provide an estimated time that the track will be at another point on the battlefield based on current movement rates. This real-time reporting will allow you the maximum amount of time to redirect slow-flying, narrow field-of-view, but high-resolution ISR assets like the Hunter UAV to identify the movements and if necessary, you can engage them.

Joint STARS can support the TF effects cell/fire support element (FSE) or air operations support element by controlling fixed-wing aviation to engage targets of opportunity both beyond and inside the fire-support coordination line (FSCL). Real-time information used in conjunction with the ground reporting will enable



These operators are responsible for coordinating all surveillance requirements with the ground units.



Joint STARS preparing for contact in order to complete aerial refueling.

the ground commander to have a sufficient picture to engage the enemy forces before they enter the direct fire engagement areas or, once within a large area, where to redirect forces to prevent an enemy penetration. In case of a penetration of friendly defensive positions, the Joint STARS crew can monitor the situation and report the actions of the enemy.

Task 4: Dynamic Tasking of ISR Asset. Many times a collection manager or an intelligence plans officer has a large AO to cover without the required amount of ISR assets. The Joint STARS is an asset that can provide immediate reporting of potential threats and assist in narrowing down the AO through MTI detection and analysis. One method of real-time narrowing of an AO is when Longbow units are conducting reconnaissance or screening operations. The aircraft has the ability to conduct PC-IDM linkage with the Longbow helicopters and other command and control (C2) aircraft in these units. The IDM link provides a real-time situation picture to the priority fire zone (PFZ) as identified by the aircraft. This situational awareness allows the ground commander to task the Longbow dynamically to look using its fire control radar at the same MTIs the tactical operations center is seeing via the CGS.

Another example is for the CGS to submit a refined or high-resolution radar service request over a point where another ISR asset reports movement, but cannot maintain "eyes on" or track. In this case, the Joint STARS can place a track on the potential threat and maintain surveillance while it is still within radar parameters.

Task 5: Troops in Contact. When a unit is engaged by an enemy force, it is likely that the commander will react by maneuvering forces to counter

the enemy and, if possible, to pursue any evading forces. Before Joint STARS, hours of darkness or bad weather severely diminished the units' ability to identify enemy escape routes. With Joint STARS, it is possible for the mission crew to place a request for high-resolution surveillance over the site, enabling the TF commander to observe escaping forces. During a pursuit, the commander could use MTI information to identify potential ambushes if enemy movement suddenly stops along an retrograde route as friendly forces are pursuing. The real-time reporting to the ground will enable the commander to make better-informed decisions than if he was not aware of the situation beyond the organic assets' range of identification. Similarly, with MTI information it is possible to determine where to position

airmobile forces to ambush retreating enemy forces and when enemy movement creates lucrative targets for air attack, such as at a choke point.

The mission crew also has the ability to perform a radio-relay function. The mission crew can take reports from the ground unit in contact and forward them to the TF commander. The ability to maintain this situational awareness can benefit a quick reaction force (QRF) or combat search and rescue (CSAR) element tasked to respond. The mission crew can provide up-to-date situation reporting until the unit in contact effects link-up with the QRF or CSAR force.

Task 6: Combat Search and Rescue. Similar to supporting troops in contact, the Joint STARS mission crew has trained to support CSAR missions as well. A mission crew is able to monitor immediate calls on the Guard or other command frequencies. The crew will place high-resolution surveillance requests on the downed aircraft site and attempt to make and maintain contact with the crew on the ground. They will also relay any radio calls to units as requested by the downed aircraft. As tasked CSAR forces begin to recover the aircraft, the Joint STARS mission crew can assume the duty of airborne mission commander (AMC) and assist in directing recovery and close-air support assets to the location of the downed aircraft. This function allows a ground commander to continue with current operations without affecting the entire current operations cell.

As the various tasks in this second scenario demonstrate, the Joint STARS aircraft can be an extremely versatile and powerful combat multiplier for



E-8C Joint STARS in flight.

the ground commander. Critical to using the aircraft most effectively is initial contact with the Army DMCC before the mission. This contact can be through the Special Operations liaison element or battlefield coordination detachment at the AOC, or directly to the Mission Planning Team (MPT). The DMCC will coordinate for the frequencies and call signs of the ground units that Joint STARS may support, as well as provide discrete frequencies on which the commander may reach the mission DMCC. Being able to use the aircraft in this phase for current operations adds to the ability of the commander to conduct his operations in depth on the ground and in time.

Conclusion

This article has described just a few of the capabilities of the Joint STARS aircraft in support of the ground maneuver commander and staff. The essential element for the commander, operations officer, and intelligence officer to remember is that the mission crew will support them in accordance with the maneuver commander's operations plan and the AOC tasking, as understood by the deputy mission crew commander. As the ground commander's representative on the aircraft, this Army officer will interpret the operations order and priority of effort as

that severely degrades the support to one unit or another is low.

Detailed integration of this system into an operation will provide a clearer situational picture to the ground elements, and allow the commander to use the finite organic maneuver assets he has better. Understanding this point and the tactics, techniques, and procedures (TTPs) shown in this paper will enable you to make Joint STARS a combat multiplier in both the intelligence preparation of an operation and mission execution.



Captain Charles Hiter is the Company Commander for the Joint STARS Company, 297th MI Battalion, Robins Air Force Base, Georgia. His experience includes Assistant Group S2, 5th Special Forces Group (Airborne); Deputy J2 for Task Force Dagger (Joint Special Operations Task Force-North) in Operation ENDURING FREEDOM (OEF); Battalion S2, 1st Battalion, 5th Special Forces Group; and more than 250 combat sortie hours as Deputy Mission Crew Commander in support of Operation IRAQI FREEDOM and OEF in 2003. Readers may contact CPT Hiter via E-mail at charles.hiter@us.army.mil or charles.hiter@garobi.ang.af.mil.

MI Corps Hall of Fame Nominations

The Office of the Chief of Military Intelligence (OCMI) accepts nominations throughout the year for the MI Hall of Fame (HOF). Commissioned officers, warrant officers, enlisted soldiers, and civilians who have served in a U.S. Army intelligence unit or in an intelligence position with the U.S. Army are eligible for nomination. A nominee must have made a significant contribution to MI that reflects favorably on the MI Corps.

The OCMI provides information on nomination procedures. If you wish to nominate someone, contact OCMI, Command Group, U.S. Army Intelligence Center and Fort Huachuca, ATTN: ATZS-MI (HOF), 110 Rhea Avenue, Fort Huachuca, AZ 85613-7080, call commercial (520) 533-1180, DSN 821-1180, or E-mail at OCMI@hua.army.mil.

Shadow TUAV Mission Process

The Goal Is Always the Right Video to the Right User

by Captain Matthew T. Gill

Part of the objective for all Shadow 200 Tactical Unmanned Aerial Vehicle (TUAV) operations is getting the right video to the right user in a timely and accurate manner. TUAV operators and leaders must establish a functional mission process to achieve this end. By using the Army's troop-leading procedures, the TUAV platoon leader and direct support (DS) military intelligence (MI) company can establish a mission process that provides timely and accurate intelligence to the maneuver unit using the Shadow 200 TUAV.

Mission planning for TUAV operations is a complex system that we must maintain and administer on a continual basis. TUAV mission planning is the responsibility of the platoon leader who must manage it in accordance with the brigade S2's intelligence synchronization. The TUAV mission process is a three-phase process that allows the platoon leader to conduct a planning process from receipt of a mission request to production of the Post-Mission Intelligence Report. Figures 1, 2, and 4 together depict the TUAV mission coordination process.

Phase 1: Mission Coordination

Photos courtesy of SGT Gillian Basso (82d PAO) and the author.



One more successful launch in support of combat operations in Iraq.

Shadow 200 TUAV mission coordination (see Figure 1) starts at the maneuver unit and is complete when the TUAV command and control (C2) element has produced an approved mission order. The TUAV C2 cell, division or brigade collection manager, and the requesting unit conduct planning. The objective for mission coordination is the production of a document that allows the TUAV platoon to begin their internal planning.

Step 1: Request for TUAV Support to Collection Manager. The brigade S2 shop will

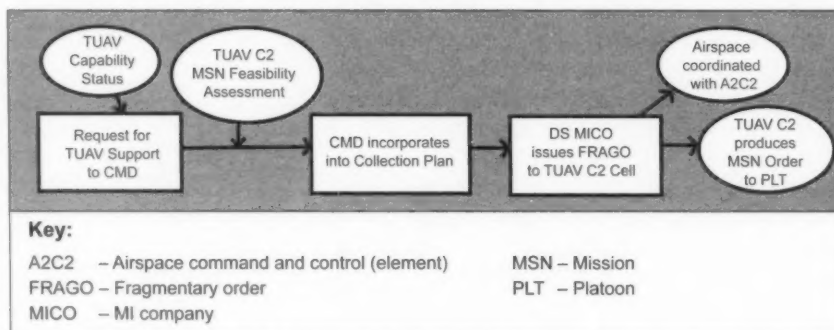


Figure 1. Phase 1: TUAV Mission Coordination.

disseminate a TUAV mission request form or use the standard request for information (RFI) format to request TUAV coverage. Once the collection manager receives the mission request, the collection manager will evaluate the mission request in accordance with the TUAV capability status provided by the platoon/DS MI company commander. The collection manager will transmit the mission request to the TUAV platoon leader for mission feasibility assessment.

The platoon leader will determine if the platoon can meet the mission request with available assets using these considerations:

- ☐ Will the platoon be able to put an aircraft in the air in time to support time on target?
- ☐ Will the platoon have enough time to recover to conduct further missions?

The platoon leader will provide a written or verbal message to the collection manager for acceptance of the mission.

Step 2: Collection manager incorporates the mission set into collection plan. The collection manager updates the necessary files in order to articulate intelligence, surveillance, and reconnaissance (ISR) coverage. Upon notification that the mission request is on the collection plan, the platoon leader will begin the orders process to begin mission planning.

Step 3: DS MI Company issues the fragmentary order (FRAGO) to the TUAV C2 Cell. In conjunction with the brigade S2 operations and planning sections, the analysis and control team (ACT) issues the TUAV C2 cell a FRAGO in order to conduct TUAV operations in accordance with the collection plan. Upon receipt of the FRAGO, the platoon warrant officer conducts all necessary airspace coordination with the appropriate Army airspace command and control (A2C2) element.

Step 4: TUAV C2 produces mission order to the platoon. Upon receipt of the FRAGO, the platoon leader begins to fill out the unit mission-order format. The platoon leader begins troop-leading procedures to ensure proper conduct of the mission and briefs the mission order to the forward site (FS) and launch and recovery site (LRS) squad leaders and the platoon sergeant (PSG).

Phase 2: Mission Planning

TUAV mission planning—conducted at the platoon leader/warrant officer level and performed in conjunction with the brigade S2—is a result of the final brigade targeting process. This phase covers all platoon internal coordination and provides them the ability to support the requesting unit. Mission planning begins with the production of the flight order, and ends upon completion of the “Go/No Go” brief. A sample pre-mission planning flow diagram appears in Figure 2.

Step 1: TUAV platoon issues flight order to crew. Upon receipt of the mission order, the FS and LRS squad leaders and PSGs begin troop-leading procedures to ensure proper conduct of the mission. The PSG conducts local-area airspace coordination (when the LRS element base is out of the active brigade aviation operations area, such as at the active rotary-wing airfield). The PSG reports



Site of the C2 element for the 313th MI Battalion.

results of local-area airspace coordination with the platoon warrant officer.

Step 2: TUAV platoon preparation. The PSG, FS, and LRS squad leaders finalize all troop-leading procedures and special coordinating instructions found in the mission order.

Step 3: Platoon issues flight plan to requesting unit. Upon completion of the steps above, the platoon leader will produce a mission profile document that articulates the “received” missions. This is the confirmation and back-brief to the requesting unit to ensure platoon has planned for the proper mission and will conduct it in accordance with the concept of ISR support of the requesting unit and brigade S2.

Step 4: Final Mission. The requesting unit coordinates with the TUAV C2 cell. The requesting unit verifies via E-mail or voice communications that the mission profile matches the mission intent; the platoon leader makes necessary changes to the mission profile, if required. The brigade S2 sec-

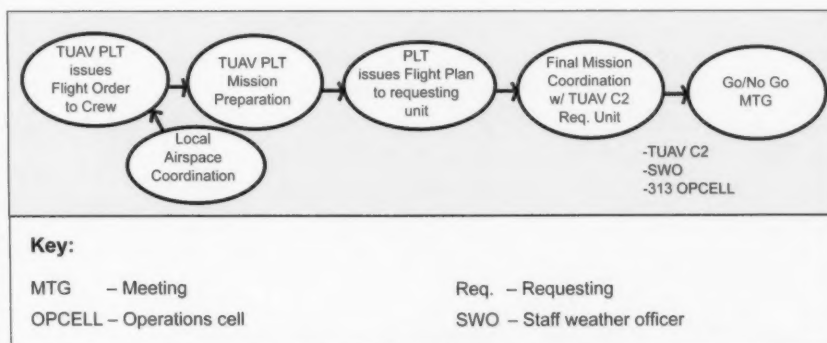


Figure 2. Phase 2: TUAV Mission Planning.

Shadow TUAV Mission Process			
The end state is always the right video to the right user			
FORWARD SITE MISSION PROCEDURES			
Time	Action	Who	
D-4	Receipt of Mission	C2	
	Receive mission request from Brigade	C2	
	Plot request in FalconView to determine feasibility	C2	
	Check weather for mission time	C2	
	Request/research incident reports or related imagery	C2	
	Provide BDE with any recommendations for mission adjustments	C2	
	Update Mission Planner slide with flight times	C2	
	Request airspace and IFF Codes (ACO/ATO)	C2	
	Prepare Mission Target Matrix	C2	
	Update FRAGO	C2	
D-3	Issue FRAGO	C2	
D	Mission Day		
T-2:30	Check ATO/ACO and published TFRs 2 hours prior to launch	C2	
T-2:00	Brief MC on mission, provide Mission Target Matrix	C2	
T-1:50	Establish radio contact with LRS 1 1/2 hours prior to launch	MC	
T-1:50	Send weather update to LRS via FM or DNV	MC	
T-1:45	Brief AVO/MPO on mission	MC	
T-1:35	Check fuel levels and equipment status	AVO	
T-1:30	Receive risk assessment (RA) #'s from LR site combine into decision RA	MC/C2	
T-1:30	Plot targets in GCS	MPO	
T-1:00	Prepare INTREP slides	C2	
T-0:45	Establish contact with BDE in mIRC Chat, provide AV number	MC	
T-0:25	Launch	MC	
T-0:15	Handoff procedures	MC/AVO	
T Hour	AV on target	MC/AVO	
	Maintain mIRC Chat communications with BDE during flight	MC	
	Post wind speed and temperature at altitude every hour to mIRC Chat	MC	
T+3:30	Post mission end time in mIRC Chat 30 prior to off station	MC	
T+4:15	Complete Mission log/AAR	MC	
T+4:30	Update flight records	SP/IP	
T+5:00	LRS calls FS to update slant/maintenance status	MC	
T+5:00	Complete and publish INTREP	C2	

LAUNCH SITE MISSION PROCEDURE			
Time	Action	Who	
D-3	Receipt of Mission	C2	
	Ensure personnel available for mission	PSG	
	Ensure equipment available for mission	PSG	
D	Mission Day		
T-3:00	Brief MC on mission, provide mission target matrix	WO/PSG	
T-2:50	Mission brief to flight line	MC	
T-2:40	Check fuel levels and equipment status	MC	
T-2:30	Plot targets in GCS	MPO	
T-2:30	Complete PMD of mission AV 2 hours prior to launch	Maint	
T-2:00	Begin preflight 1 1/2 hours prior to launch	MC	
T-1:50	Establish radio contact with FS 1 1/2 hours prior to launch, send tail number	MC	
T-1:50	Receive weather update from FS via FM	MC	
T-0:55	Call ATC to activate ROZ 30 min prior to launch	MC	
T-0:55	Call FS via FM 30 min prior to launch, verify tail number	MC	
T-0:40	Engine starts 15 min prior to launch	MC	
T-0:35	Call ATC to request permission to launch 10 min prior	MC	
T-0:28	Call FS via FM 3 min prior to launch to receive permission to launch	MC	
T-0:25	Launch (25 min prior to TOT)	MC	
T-0:15	Call ATC at 5000 feet to deactivate ROZ	MC	
T-0:15	Handoff procedures at 5000 feet	MC/AVO	
T-0:15	Monitor flight, be prepared to receive mission	MC/AVO	
T Hour	AV on target	AVO	
T+4:00	Call ACT to activate ROZ 30 min prior to recovery	MC	
T+4:00	Handoff procedures at end of mission or approx. 9 liters	MC/AVO	
T+4:30	Call ACT when AV lands to deactivate ROZ	MC	
T+5:00	LRS calls FS to update slant/maintenance status	MC	
T+5:00	Update flight records	SP/IP	
T+5:00	Update mission log/AAR	MC	

Key:

AAR – After-action report
ACO – Airspace control order
ACT – Analysis & control team
ATC – Air control tower
ATO – Air tasking order
AV – Air vehicle
AVO – Air vehicle operator

DNVT – Digital nonsecure voice
FS – Forward site
GCS – Ground control station
IFF – Identification, friend or foe
LRS – Launch and recovery (site)
MC – Mission commander
MPO – Mission payload operator

PMD – Pre-mission inspection
PSG – Platoon sergeant
ROZ – Restricted operating zone
SP/IP – Standardization pilot/instructor pilot
TFRs – Temporary flight restrictions
TOT – Time on target

Key:

AAR – After-action report	DNVT – Digital nonsecure voice	PMD – Pre-mission inspection
ACO – Airspace control order	FS – Forward site	PSG – Platoon sergeant
ACT – Analysis & control team	GCS – Ground control station	ROZ – Restricted operating zone
ATC – Air control tower	IFF – Identification, friend or foe	SP/IP – Standardization pilot/instructor pilot
ATO – Air tasking order	LRS – Launch and recovery (site)	TFRs – Temporary flight restrictions
AV – Air vehicle	MC – Mission commander	TOT – Time on target
AVO – Air vehicle operator	MPO – Mission payload operator	

Figure 3. Forward and Launch Site Mission Procedures.

tion must establish a “no later than change time” to provide the platoon with the appropriate level of planning and preparation time. For example, “*The cutoff time for all mission changes for the next 24 hours is 0800 daily.*” This can also be the closure of the daily targeting board.

- ☐ **Step 5: Go/No Go Brief.** TUAV C2, DS MI company, brigade S2 Operations, and brigade S3 Operations will conduct a daily go/no go brief to determine final mission conduct. The brigade

SOP will determine format for the go/no go brief. The following personnel are the required attendants at this briefing:

- ☐ TUAV platoon leader.
- ☐ TUAV platoon warrant officer.
- ☐ Brigade S2 Operations officer in charge.
- ☐ Brigade regimental aviation (RAVN) representative.
- ☐ Brigade S3 Operations representative.

- ☐ Staff weather officer (SWO).
- ☐ Air liaison office (ALO) representative.

Proper use of time before conducting a mission is dependent on the platoon leadership issuing a timely accurate mission order. Figure 3 lists the forward site mission procedures.

Phase 3: Collection and Analysis

The brigade conducts the collection and analysis phase at the flight-crew level. Beginning with the launch of the AV, the flight crew is in continuous contact via mIRC Chat¹ or FM with the maneuver unit and the division or brigade analysis and control element (ACE). This phase begins with the launch of an AV and ends when they publish the Post-Mission Intelligence Report (see Figure 4).

Step 1: Conduct Mission.

Step 2: Mission Updates via mIRC Chat or FM. TUAV C2 will maintain E-mail, mIRC Chat and FM communications with the requesting unit and all other mission support agencies. The platoon will provide continuous updates to the requesting unit via mIRC Chat or FM. The Controlling Site will be prepared to receive terminal guidance from the requesting unit. The TUAV C2 and FS controlling element will maintain the ability to send National Imagery Transmission Format (NITF) updates to the requesting unit.

Step 3: Produce Final Mission Summary. The TUAV C2 cell in coordination with brigade S2 Operations will produce a post-mission intelligence report. The platoon will conduct an after-action review for all missions and log data into the established post-mission log maintained by the platoon leader and platoon warrant.

Step 4: Disseminate Final Mission Intelligence Report

(INTREP) (NLT 4 Hours after the Mission). Upon completion of the post-mission INTREP, the platoon leader and brigade S2 Operations section will transmit the INTREP to the following (at a minimum).



1st Platoon, A Company, 313th MI Battalion established their Forward Site GCS at the DIV Main Command Post, one of Saddam Hussein's summer palaces.

- ☐ Collection manager.
- ☐ Brigade S2.
- ☐ Brigade S3.
- ☐ DS MI company commander.
- ☐ DS MI company ACT.
- ☐ ACE all-source section.
- ☐ ACE imagery intelligence (IMINT) section.
- ☐ Brigade S2 Operations for posting.

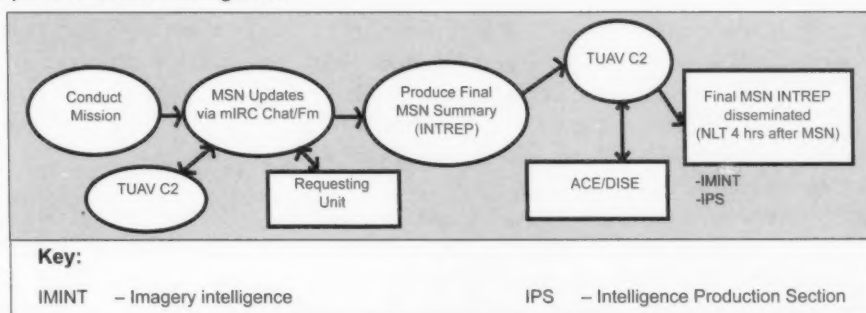


Figure 4. Phase 3: TUAV Collection and Analysis.

Conclusion

Proper mission planning is one of the initial keys to success for any operation and that is especially appli-

(Continued on page 36)

What Is "DCGS-A"?

by Colonel Stephen J. Bond

"DCGS-A is one of the cornerstone systems of the Objective Force...."

—General Eric K. Shinseki, Former U.S. Army Chief of Staff, 21 November 2002

"DCGS-A is the centerpiece of the future intelligence framework and is the enabler for all operations...."

—Lieutenant General Keith B. Alexander, Deputy Chief of Staff (DCS) G2, U.S. Army, in testimony before the Senate Armed Services Committee, 7 April 2004

Continued advances in information technology (IT) are rapidly changing the way we are able to move, store, and process information. All of us are aware of these changes and their impact on our daily lives. Major automation changes occur so fast that we often forget that complex tasks have become much simpler, and that while these changes make more information available to use, automation can also help sift through mounds of data. "Moore's Law" holds that the amount of information storable on a silicon chip roughly doubles every 18 months. Enhanced communications capabilities such as "broadband" and "high-speed Internet" allow large amounts of data to move at rapid rates to anyone in the network. Other Internet technologies such as web browsers enable common viewing of information for users accessing the information. Data storage and retrieval is becoming faster and more refined.

Coinciding with advances in IT, the Department of Defense (DOD) and the military services speak of the "Command, Control, Communications, Computers (C4) and Intelligence, Surveillance, and Reconnaissance (ISR) Transformation," "net-centric warfare," "horizontal fusion," and other network concepts that will rely on automation and communications to speed and process information, breaking down barriers in the information stream to get the right information to the right place at the right time. As part of the DOD C4 and ISR Transformation, the DOD Distributed Common Ground/Surface System (DCGS) effort provides the framework for the military services to develop a common, interoperable, family of systems to task, post and process, use, and disseminate ISR sensor data and intelligence products.

The Army's solution to meet these challenges is the Distributed Common Ground System-Army (DCGS-A). This system will transform the way we in Army Military Intelligence (MI) task ISR sensors, as well as move and process ISR sensor data and intelligence information to support commanders and soldiers. This system will provide an automated and auto-assisted data-fusion capability to enable situational awareness and understanding, allowing commanders to accelerate the decision-action cycle. In some cases, it will change the way MI does business, as this is more than a change of equipment. It will also impact current doctrine, training, leader development, organizations, personnel and facilities. In this fast-paced and changing environment, DCGS-A concepts have also changed, as the Army refines the evolving operational concepts it will support. The result has often been confusion and misrepresentation of this system. Critical questions we must answer include—

- ☐ What is this system and what does it mean for soldiers in the future?
- ☐ Where will this system be located?
- ☐ When is this "net-centric" ISR enterprise going to exist?

This article will answer these questions.

What Is DCGS-A?

DCGS-A is an emerging MI system that will use IT to consolidate the capabilities found in all our current ground stations. It is the ISR fusion and processing system of systems for the Army's Future Force. Imagine a single system that consolidates functions and replaces the following current MI systems:

- ☐ All-Source Analysis System (ASAS).
- ☐ Counterintelligence/Human Intelligence (CI/HUMINT) Single-Source Workstation.
- ☐ Tactical Exploitation System (TES) family of systems.
- ☐ Guardrail Information Node (GRIFN) and Guardrail Common Sensor (GRCS) Intelligence Processing Facility (IPF).
- ☐ Prophet control.
- ☐ Joint Surveillance Target Attack Radar System (Joint STARS) Common Ground Station (CGS).
- ☐ Enhanced TRACKWOLF processing capabilities.

It will also contain Digital Topographic Support System (DTSS)- and Integrated Meteorological System (IMETS)-like capabilities.

DCGS-A is more than just a consolidation of our current ground processing capabilities. It will interoperate and network with other Service's DCGS, as well as with databases and systems owned and operated by the national Intelligence Community. DCGS-A will leverage national and Joint ISR capabilities down to joint task force (JTF)-level, into Army Units of Employment (UEs), Units of Action (UAs), and into the Future Combat System (FCS), the future Battle Command System (BCS), and Land Warrior. It will also enable information-sharing with our coalition partners.

As the ISR processing component of the future BCS and a complementary system to FCS, DCGS-A will facilitate providing near-real-time (NRT) information and visualization for every echelon, providing the threat, the "unknown" variables of the contemporary operating environment (COE), terrain, and weather slices of the common operational picture (COP). It will enable collaboration and "reach" at multiple echelons, allowing users to reach to an analytical center, including to a national Intelligence Community analytical element or "Knowledge Center" as necessary (see Figure 1).

DCGS-A supports targeting, ISR Management, and Synchronization (of organic and non-organic sensors) as well as the exploitation of information through automated and semiautomated fusion of information

from multiple sources, and it provides analyst tools. It will be modular, scaleable, and tailorable based on mission needs, improving unit deployability and sustainability. This will reduce units' forward footprints by providing time-sensitive intelligence, information, and data forward, while reducing the number of soldiers and quantity of equipment required forward, especially at brigade and lower levels. It will receive and process ISR data from a wide variety of automated and manual sensors and sources, including space platforms, manned and unmanned air sensor platforms, and ground sensors. DCGS-A will also access an assortment of correlated databases, all of which will be interactive and updated in NRT.

The system serves as the designated ground control station for Aerial Common Sensor (ACS), Prophet, and other sensors. DCGS-A will allow Joint warfighters, Army commanders at all levels, and individual soldiers to be aware of and visualize enemy forces and environmental

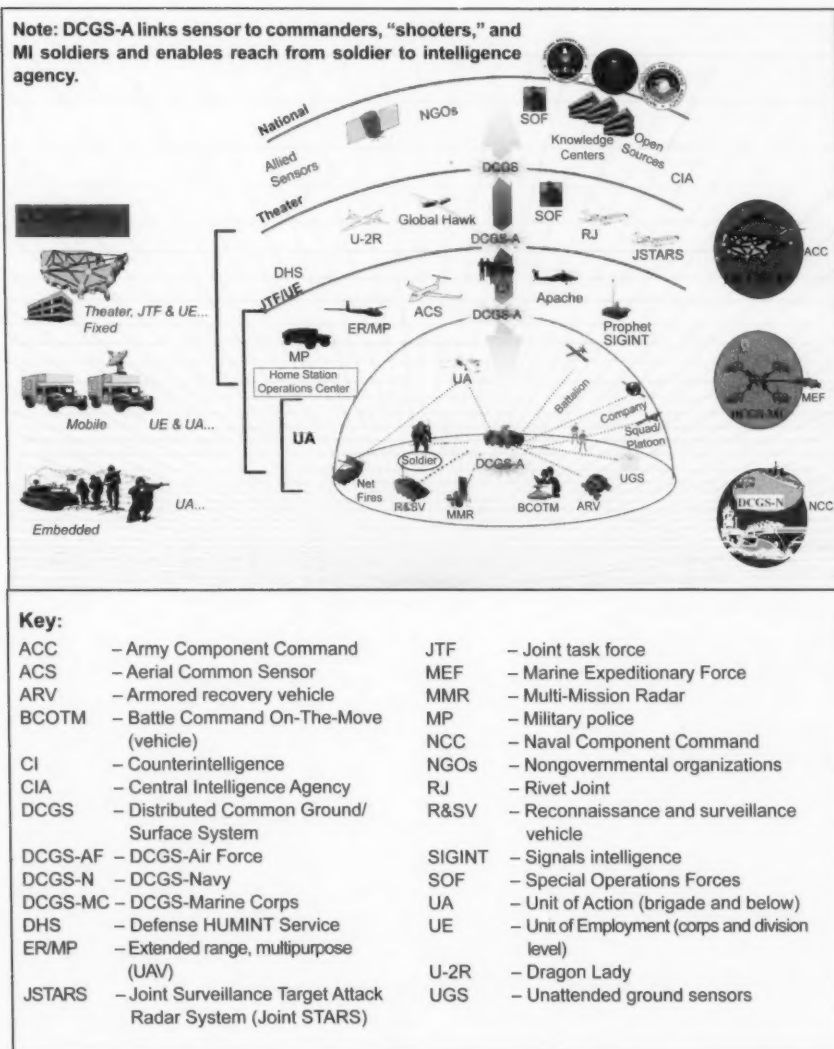


Figure 1. DCGS-A Interoperability—"Mud to Space."

considerations. When combined with the "friendly picture," it will provide tools to enable understanding of the consequences as each of these complex entities interact—the essence of the Army Vision and "network-centric warfare."

Operators of this system will range from individual soldiers to commanders and MI specialists, located at all organizational levels and echelons. DCGS-A will provide MI soldiers with access to information sources and the tools to perform their missions. It will provide other, non-MI soldiers and commanders with ISR tools



Photograph courtesy of PM DCGS-A.

Operators using prototype DCGS-A fixed site workstations at 513th MI Brigade, Fort Gordon, Georgia.

and information not available to them today. These users will be able to access the network and input data, while simultaneously reaching a wide variety of information sources and sensor information. Some users will have special permissions to task and control sensors; MI soldiers using this system will work in a multiple-intelligence-discipline environment with the ability to task and control multiple sensors and cross-cue sensors to confirm information. They will also be able to collaborate with their counterparts in another Service's DCGS node, an analysis and control element (ACE) at home station, a Joint Intelligence Center, or with an analyst at a national intelligence agency. Every soldier will routinely benefit from this system through timely and relevant information posted to the COP.

Where Will It Be?

DCGS-A will be a component of the future BCS and part of the ISR sensor network in the Global Information Grid (GIG). DCGS-A "nodes" will be at multiple locations and at multiple echelons linked into the network (see Figure 2) to interface and interoperate with sensors and other Service component's DCGS family

of systems, and to facilitate reach from the forward deployed soldier to national intelligence agencies. There will be three primary types of DCGS-A nodes; two are physical configurations (fixed facilities and mobile systems) and the third is DCGS-A software embedded in future battle command and future combat system workstations.

At corps, and army-level headquarters of today—termed Units of Employment "y" (UEy) for higher-level operational headquarters in the Future Force—DCGS-A will be primarily in fixed facilities. **Fixed DCGS-A sites**, including the soldiers and civilians operating the system at those facilities, will perform the "heavy lifting" for deployed units, tasking, for example, national sensors and providing analytical "overwatch" for deployed elements.

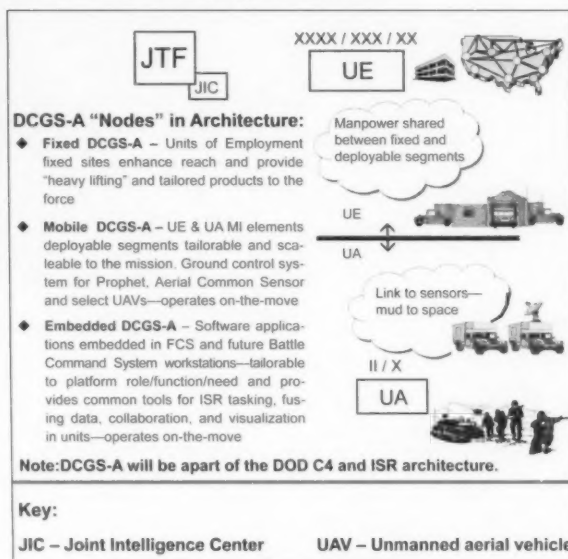


Figure 2. DCGS-A Configurations.

There will also be small, deployable, **mobile DCGS-A configurations** specifically designed to support senior commander's (JTF, UEy, and tactical-level higher headquarters similar to division-level organizations of today [UEx]) in the forward areas to broker ISR support between fixed sites, forward, and adjacent units. For example, the mobile system could have forward data links to sensors, analyst workstations, and ISR software tools to support the Joint or combined arms commanders in a forward area. At brigade and below-level organizations (termed "Units of Action [UAs]") with MI elements, DCGS-A will be primarily ISR software applications and workstations to enable MI soldiers to perform their traditional missions, while mounted in vehicles to support maneuver commanders enroute and on-the-move as needed.

Within all Army units, DCGS-A **embedded software** will assist soldiers to perform ISR functions in the FCS, eventually Land Warrior, and in the future BCS. Soldiers using ISR applications will be able to task and manage sensors; post, process, and exploit data from these sensors; and direct and disseminate information where it needs to go, while enroute and on the move. DCGS-A will facilitate and enhance collaboration at every level; however, each echelon could operate independently.

When Will DCGS-A Exist?

Many of the capabilities described above do not exist today. For example, the DCGS-A concept relies on a communications network—the global information grid—being built now and it does not yet extend to deployed tactical units with sufficient bandwidth to move large amounts of data and information. Automated information-fusion capabilities is another area requiring further development, and for the foreseeable future, a “man in the loop” or analyst will be needed to apply reason and judgment to tactical problems. Interoperability challenges also exist with our sister Services and the national Intelligence Community.

The initial operating capability (IOC) for a fully functional DCGS-A achieving the basic or threshold requirements is currently set for 2010. This IOC is based on dependencies with other Future Force systems—such as the Warfighter Information Network-Tactical (WIN-T) and the Joint Tactical Radio System (JTRS)—and on the availability of emerging science and technology advances such as automated data-fusion functions for use. However, as part of Army efforts to “reset” and improve the Current Force, efforts are currently underway to accelerate available DCGS-A capabilities into units now and in the next few years.

Initial DCGS-A steps are underway at U.S. Army Intelligence and Security Command's (INSCOM's) 513th and 501st MI Brigades, and the 66th MI Group, where fixed sites based on the DCGS-A concept are supporting operational forces now. Furthermore, this year (2004) in XVIII Airborne Corps and next year (2005) in III Corps, the units will network current ground stations to improve interoperability, data-sharing, and collaboration. There are also plans under consideration to expand on these developments by establishing additional fixed sites and to network the current ground

systems at other corps, in the divisions and brigades, and to push additional ISR processing capabilities into maneuver battalions (see Figure 3) over the next two years to upgrade the capabilities of units deploying to fight the Global War on Terrorism. These initial steps will begin the transformation of ISR networked capabilities but the vision for DCGS-A is a global, Joint, interoperable, ISR network linking sensors “mud to space” with Army, Joint, interagency, and multinational users, leveraging the “power of the network” down to the individual soldier and back to a national intelligence agency as needed to support operations, ultimately enabling “situationally aware” commanders to *“See First, Understand First, so they can Act First, and Finish Decisively.”*

Conclusion

DCGS-A is a future concept that is rapidly becoming a reality. It will be the centerpiece of all Army ISR processing in the future, is part of an ISR network supporting all echelons, and is “Joint interoperable.” MI soldiers and other combat, combat support, and combat service support soldiers requiring ISR information and capabilities will be the DCGS-A users. The system will be configured in fixed sites, mobile elements, and embedded software applications on battle command worksta-

2004

- Fixed site established at 66th MI Group, Europe.
- Operational Requirements Document approved by Joint Staff.
- Current force enhancement at XVIII Airborne Corps, Fort Bragg.

2005

- All Services required to implement the common DOD-wide DCGS Integration (software) Backbone (DIB) to facilitate cross-Service interoperability.
- ISR enhancements for current deploying forces.

2006

- Aerial Common Sensor (ACS) ground station capability required
- ISR enhancements for current deploying forces

2007

- Embedded capability in Future Combat System (FCS).
- DCGS-A Milestone C or “full production decision”.

2010

- Objective DCGS-A Initial Operational Capability (IOC) per ORD.

2012

- Objective DCGS-A Full Operational Capability (FOC).

Figure 3. Current DCGS-A Key Milestones to 2012.

tions. It will ultimately provide the functionality that provides threat, terrain, and weather information through all operational phases (alert, enroute, entry, decisive operations, conflict termination, and transition), thus enabling the force to—

- ☐ Find, engage, and kill targets—reducing the sensor-to-shooter timeline.
- ☐ See over the next hill.
- ☐ Predict opposing force actions—providing the basis for the “running intelligence estimate.”
- ☐ Conduct three-dimensional mission rehearsals.
- ☐ Plan, task, synchronize, and direct the use of ISR collection assets as well as control specified technical sensors.



Editor's note: Effective 7 July 2004, the Change of Charter Includes a change in name. The U.S. Army Training and Doctrine Command (TRADOC) System Manager (TSM) Joint STARS and DCGS-A became the TSM Sensor Processing.

Colonel Steve Bond completed his tour as the TRADOC System Manager (TSM) for Joint STARS, Common Ground Station, Joint Tactical Terminal, and the Distributed Common Ground System-Army on 7 July 2004. One of his major responsibilities in this position was to lead the user requirement developments for DCGS-A and to obtain Army and Joint Staff approval for this future system. Readers may contact him via E-mail at steve.bond@us.army.mil or through the TSM office at (520) 533-2480 or DSN 821-2480.

Shadow TUAV Mission Process — The Goal Is Always the Right Video to the Right User

(Continued from page 31)

cable to TUAV operations. By developing a functioning process over time, TUAV leaders and operators will be able to prepare and conduct operations that will meet the intent of the supported maneuver unit. One of the most difficult things for junior leaders to do is to combine the military decisionmaking process (MDMP) and troop-leading procedures at the small-unit level. Only through a systematic planning process can we fully and effectively integrate new and technically advanced intelligence assets into the maneuver fight.



Endnote

1. The expansion of “mlRC Chat” is Mardam-Bey’s Internet Relay Chat. See for example, “Viral Contagia in Cyberspace” by Colonel

John C. Deal, U.S. Army; Robin Schueneman; and Major Gerrie A. Gage, U.S. Army, in *Military Review*, March-April 2001, <www-cgsc.army.mil/milrev/english/MarApr01/deal.asp///.

Captain Matt Gill is currently Commander, D Company, 313th MI Battalion. He was the Assistant Operations Officer (S3) for the 313th MI Battalion, 82d Airborne Division stationed in Ar Ramadi, Iraq. His previous intelligence assignments include S2, 2d Battalion, 505th Parachute Infantry Regiment (PIR), and the Assistant Brigade S2, 505th PIR, 82d Airborne Division, Fort Bragg, North Carolina. CPT Gill's operational deployments include Operation DESERT THUNDER (February-July 1998), Operation ENDURING FREEDOM, Kandahar, Afghanistan (July 2002-January 2003), and Operation IRAQI FREEDOM (September 2003 to present). Readers may contact the author via E-mail at matthew.gill@us.army.mil.

Suggestions or Comments

MIPB disseminates material designed to enhance individuals' knowledge of past, current, and emerging concepts, doctrine, material, training, and professional developments in the MI Corps. If you have comments, critiques, questions, and/or suggestions on how we might improve any aspect of this publication, please contact us. You can write to us directly at ATTN ATZS-FDT-M, U.S. Army Intelligence Center and Fort Huachuca, 550 Cibique Street, Fort Huachuca, AZ 85613-7017, or E-mail us at mipb@hua.army.mil.

Do "Steady State" PIRs Work In Stability Operations and Support Operations?

Answering the Commander's Intelligence and Decisionmaking Needs

by Lieutenant Colonel
Joseph A. Nelson

A version of this article previously appeared in the Center for Army Lessons Learned (CALL) Battle Command Training Program (BCTP) Battle Command Bulletin 04-4.

"One of the most difficult things we have to do in war is to recognize the moment for making a decision. Information comes in degrees. Shall we make a decision now or wait a little longer? It is usually more difficult to determine the moment for making a decision than it is to formulate the decision itself."

—Adolf Von Schell¹

Answering the commander's intelligence needs is rarely easy in any type of conflict. The information required by a commander in a stability operation and support operation is clearly different from the types of information he requires for a conventional conflict. **FM 100-23, Peace Operations**,² states that the intelligence needs in these types of operations "are in some ways more complex than those of the commander conducting combat operations in war." The 3d Infantry Division (3ID) initial after-action review (AAR) stated that:

"There are several other demands on the division level [Intelligence battlefield operating system] IBOS that come with a transition to [stability operations and support operations]...the details of infrastructure (water, power, sewage, cultural centers, mosques)....the ethnic, religious, and cultural makeup of the population is important in predicting the actions of the population."

What drives the Intelligence BOS to answer the commander's intelligence needs?

The way a commander expresses his intelligence needs in any type of conflict is through priority intelligence requirements (PIRs). However, there is a current doctrinal shortfall regarding how to use PIRs best in a stability operations and support operations environment. This shortfall may very well hamper both decisionmaking and ISR collection. Units conducting current stability opera-



Members of the 4th Civil Affairs Group, U.S. Marine Corps, distributing food in An-Nasiriah on 2 April 2003.

Photograph courtesy of U.S. Central Command.

tions and support operations missions in both the Balkans and Iraq have come up with tactics, techniques, and procedures (TTPs) to ensure they have intelligence requirements to drive decisions. However, there needs to be a doctrinal revision of how we should craft and use PIRs in a stability operations and support operations environment.

General Doctrine on PIRs

To illustrate this point, one needs to look at the doctrinal function of PIRs and their current use in exercises and stability operations and support operations. The doctrinal purpose and structure of PIRs have remained relatively constant over the last decade.

- ❑ "Good PIR[s] ask one question; focus on a specific fact, event, or activity; and provide intelligence required to support a single decision." (**FM 34-2, Collection Management and Synchronization Planning**, dated March 1994).
- ❑ "PIR[s] are intelligence requirements associated with a decision that will affect the overall success of the command's mission." (**FM 34-8-2, Intelligence Officer's Handbook**, dated May 1998).
- ❑ PIRs are "Those intelligence requirements for which a commander has an anticipated and stated priority in his task of planning and decisionmaking." (**FM 101-5-1, Operational Terms and Graphics**, dated September 1997, and **FM 3-0, Operations**, dated June 2001).
- ❑ The latest intelligence doctrine document does not specifically address PIRs in stability operations and support operations but does again reinforce the earlier doctrine by stating, "Answers to the PIRs help produce intelligence essential to the commander's situational understanding and decisionmaking." **FM 2-0, Intelligence**, 17 May 2004).

Note the common thread that the PIRs are critical to a decision. Figure 1 is an example of some warfighter exercise (WFX) PIRs that fit the above criteria.

1. Where will the enemy commit reconnaissance and surveillance assets (993d SPF BDE, 3251st SPF BN, 997th CDO BDE, 327th RPV REGT) against the XX DIV? LTIOV: OPEN
2. What is the location of OSC-1 IFC C2 and firing assets and where will they commit against XX DIV (151st ARTY BDE, 152d ARTY BDE, 155th MRL BDE, 158th MRL BDE, 311th AVN REGT, 310th AVN REGT, 313th AVN REGT)? LTIOV: H+100
3. Will the enemy threaten XX DIV right flank with armor brigades out of OSC-3 (234th AR BDE) and/or OSC-4 (352d/354th AR BDE) vic NAIs 14, 16, 34, and 46? LTIOV: H+144
4. Where and with what assets will the enemy commit a strike (114th AR BDE, 303d MECH BDE, 305th AR BDE, 234th AR BDE, 158th MRL BDE, 312th AVN REGT) against XX DIV? LTIOV: H+150
5. What is the disposition of the 303d MECH BDE and the 305th AR BDE and will they strike XX DIV through AA 1a? LTIOV: H+150

Key:			
AA	- Avenue of approach	C2	- Command and control
AR	- Armor	CDO	- Commando
ARTY	- Artillery	IFC	- Integrated Fires Command
AVN	- Aviation	LTIOV	- Latest time information is of value
BDE	- Brigade	MECH	- Mechanized
BN	- Battalion	MRL	- Multiple Rocket Launcher
		NAIs	- Named areas of interest
		OSC	- Operational Strategic Command
		REGT	- Regiment
		RPV	- Remotely piloted vehicle
		SPF	- Special purpose forces
		vic	- Vicinity

Figure 1. Example of PIRs From a Warfighter Exercise.

The type of PIRs described above work well for a major conflict or an exercise involving a robust enemy that has objectives and large forces, and who must make decisions that we can "de-synch" through our operations (see Figure 2).

Specific Doctrine on PIRs in Stability Operations and Support Operations

However, since the end of the Cold War, the U.S. Army has been involved more often in stability operations and support operations (Haiti, Bosnia-Herzegovina, Kosovo, and the later stages of Operations IRAQI FREEDOM and ENDURING FREEDOM [OIF and OEF, respectively]) than in major conflicts. Current doctrine for stability operations and support operations does not adequately address PIR usage and construction in this environment.

Here are two examples of how field manuals (FMs) on stability operations and support operations doctrinally address PIRs:

- ❑ **Special Text (ST) 2-91.1** (formerly FM 34-7), **Intelligence Support to Stability Operations and Support Operations**, Revised Final Draft, August 2004, states that "There may be little difference between the PIR commanders establish at the onset of stability operations and support operations operations and their PIR months into the operation."

Editor's note: ST 2-91.1 is currently being staffed for approval at USAIC & FH.

- ❑ **FM 3-07, Stability Operations and Support Operations**, February 2003, reinforces this by stating that "In stability operations and support operations operations, collection and production to answer PIR may be ongoing tasks. For example, PIR related to treaty verification or force protection may continue as long as the mission requires."

What happened to the stated purpose of PIRs in driving decisions? If PIRs remain the same, does that mean the commander never has to make decisions in a stability operations and support operations environment or that he makes the same decisions virtually everyday? If PIRs are no longer what drive a commander to make a decision, what does?

Use of PIRs in Exercises

To illustrate how this "steady state" PIR concept may hamper decisionmaking, let us look at some intelligence requirements used in past Stabilization Force (SFOR) and Kosovo Force (KFOR) mission rehearsal exercises (MREs). We can then look at how units have—out of necessity due to the lack of doctrinal guidance—recrafted their intelligence requirements to make them more relevant and apt to drive decisions.

In [stability operations and support operations]...other threats may include infectious disease, regional instabilities, or misinformation.

—FM 3-0, Operations, June 2001

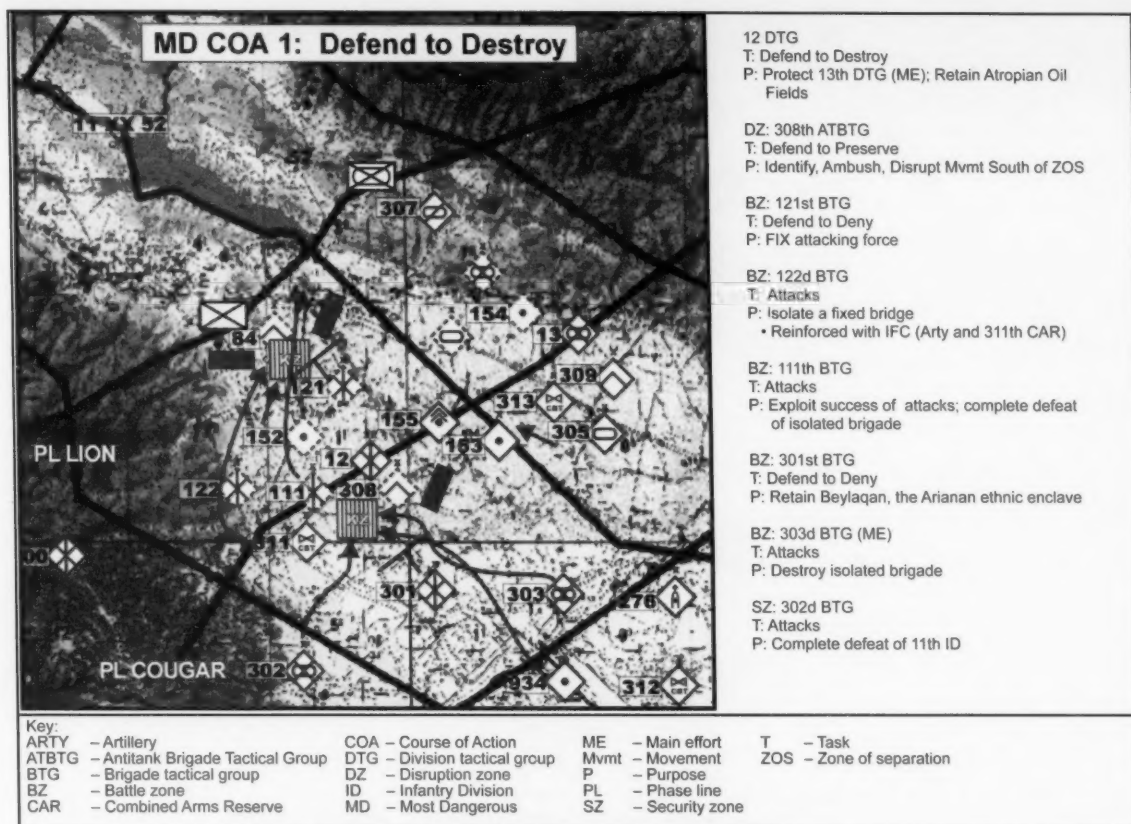


Figure 2. Most Dangerous Course of Action 1.

Throughout the course of the MRE, the unit collected pieces of intelligence to drive different operations. In one particular exercise, the unit had a great deal of very specific information regarding organized crime, smuggling routes, corrupt officials, etc., in order to prompt them to set up check points to interdict the smugglers. The morning update briefed the commanding general that, based on the intelligence received, PIR 4 (see Figure 3) had been virtually answered. The battle captain-briefer then stated he had no idea what decision that PIR supported.

He was not alone since the personnel in the unit had not thought through what they would do had they actually gotten an answer to any of the "steady state" PIRs. There was no developed decision support template (DST). How can one make a DST when the PIR does not drive a decision?

Outside the MRE environment, are "steady state" PIRs as currently published even answerable? How much information do we need before we make a decision? If we look at PIR 3 as an example, there is probably a great deal of information available to answer that PIR. The anti-SFOR leaders and parties are very well known and in some cases even have their own websites. How can the commander of a military force in a stability operations and support operations action conduct a campaign against a political party? He cannot and should not be expected to do so.

Units have come up with several methods to overcome the shortfall of "steady state" PIRs and the difficulty of using them to drive decisions. Some of these methods include—

- ☐ Crafting their information requirements (IRs) to drive decisions (see Figure 4 for sample IRs).
- ☐ Using "short term," "focused," or "operational" PIRs.
- ☐ Using specific information requirements (SIRs) to drive operations.

FM 2-0, Intelligence, defines "information requirements" as:

"...all of the information elements required by the commander and his staff for the successful planning and execution of operations; that is, all elements necessary to address the factors of mission, enemy, terrain and

PIR 1: What are the location and nature of any terrorist threat to SFOR units or members of the international community in MNB-N?		
PIR 2: Which intelligence service, special police force, AFiBK, criminal element, and/or political element is attempting to disrupt stability in MNB-N?		
PIR 3: What are the political organizations and leaders controlling programs to limit the returns of each faction (Bosniac, B-Croat, and B-Serb) in MNB-N?		
PIR 4: Which individuals or groups are involved in directing organized crime and corruption activities in MNB-N that undermine economic stability and jeopardize a safe and secure environment?		
Key: B-Croat – Bosnian Croat B-Serb – Bosnian Serb SFOR – Stabilization Force		

Figure 3. Published PIRs for SFOR.

IR 1: Where will criminal organizations attempt to transport and sell contraband in MNB-N?	
IR 2: What foreign service intelligence agencies are attempting to gather information on SFOR in MNB-N?	
IR 3: Where are PIFWCs located in MNB-N?	
IR 4: Where is the AFiBK in violation of GFAP and/or OHR guidelines in MNB-N?	
Key: GFAP – General Framework Agreement for Peace PIFWCs – Persons Indicted for War Crimes OHR – Office of the High Representative	

Figure 4. Published IRs for SFOR.

weather, troops and support available, time available, civil considerations (METT-TC). Vetting by the commander or his designated representative turns an IR into either a PIR or an intelligence requirement. IRs are developed during [courses of action] COA analysis based on the factors of METT-TC.”³

Editor's note: **FM 2-0** defines “intelligence requirements” as:

“...those requirements generated from the staff's IRs regarding the enemy and environment that are not a part of the [commander's critical information requirements] CCIR (PIR and [friendly forces information requirements] FFIR). Intelligence requirements require collection and can provide answers in order to identify indicators of enemy actions or intent, which reduce the uncertainties associated with an operation. Significant changes (i.e., branches and sequels) with an operation usually lead to changes in intelligence requirements.”⁴

Figure 1-3 in **FM 2-0** highlights the difference between these requirements: the information requirements (IRs) are “information elements required for planning and executing operations” while intelligence requirements are those “...for the Intelligence BOS to fill a gap in the Commander's and Staff's knowledge or understanding of the battlespace or threat.”⁵

The examples above are of IRs that collectors can actually answer. What is more, once answered, these IRs can drive operations much more clearly than the PIRs. For example, with IR 4, if we know where the Armed Forces of Bosnia-Herzegovina (AFiBK) is in violation, SFOR can quickly launch an operation to ensure compliance. There are likely “playbook” actions that address every type of reaction to any of the above IRs.

Thus, in some units, it appears that IRs have supplanted PIRs as the vehicle to aid making a decision in a stability operations and support operations environment. However, the most common technique that units employ to overcome the unanswerable and non-actionable “steady state” PIR is by making other PIRs for specific operations. Figures 5 and 6 present examples from two different units' MREs.

These PIRs serve the purpose for the short-term operation by providing clear, focused, and answerable intelligence requirements that will drive the decisions and operations of that SFOR force. However, using “operational” or “focused” PIRs creates other problems for units.

Once a unit publishes “operational” PIRs, they have likely doubled the number of PIRs on which their organic intelligence assets must collect. Units do not usually have enough intelligence assets to collect on all their intelligence requirements; that is why we have PIRs to focus those precious assets on only those most critical intelligence require-

<p>PIR 1.1: Which border-crossing site will be used to facilitate movement of illegal weapons across the Federal Republic of Yugoslavia/Republika Srpska border? Action: Inform MNB(N) Operations immediately. LTIOV: 101200A SEP 03</p> <p>PIR 1.2 : Will the white VW van (License #Z14398) cross the Federal Republic of Yugoslavia/ Republika Srpska border into TF North or TF South's AO? Action: Inform MNB(N) Operations immediately. LTIOV: 101200A SEP 03</p>	<p>Key: AO – Area of operations MNB-N – Multinational Brigade-North TF – Task Force</p>
---	--

Figure 5. Operation PIRATE PIR.

<p>PIR 1: What are B-Serb obstructionists doing to halt the mosque dedication effort in Bratunac?</p> <p>PIR 2: Will Bratunac Deputy Mayor Dragan Nikolicvic actively obstruct the ceremony?</p> <p>PIR 3: Will members of the Swords of Zvijezda crime organization work with B-Serb government officials to obstruct the mosque dedication?</p> <p>PIR 4: Will crowds of more than 20 B-Serbs assemble?</p> <p>PIR 5: Will individual B-Serbs be carrying arms (pistols, rifles, knives)?</p>

Figure 6. PIR for Mosque Dedication.

ments. Once a unit has another set (or two in some cases) of "operational" PIRs, it becomes unclear at the headquarters and the subordinate units how they will assign intelligence assets against the "steady state" and "operational" PIRs. Which "steady state" PIRs take a back seat to the new "operational" PIRs? Do we rank order both sets of PIRs and assign assets based on the PIRs' priority within that composite list? These are difficult questions that do not have simple answers. The Battle Command Training Program (BCTP) team has observed units in Balkans MREs and in the Balkans struggling to determine how to collect against up to 12 current PIRs. There will not ever be enough assets available to answer that many PIRs.

Using SIRs to Drive Operations

Another technique that units have used to ensure that their "steady state" PIRs drive operations is ensuring that they always list PIRs with their SIRs. **FM 34-2** defines "SIR" as a: "...description of the information required to answer all or part of an intelligence requirement. A complete SIR describes the information required, the location where the required information can be collected, and the time during which it is to be collected. Generally, each intelligence requirement generates sets of SIRs."

The unit then color-codes their SIRs with, for example, *red* meaning that an answer to that SIR will drive a specific "playbook" type of operation and *blue* would drive further collection, continued tracking, or both. The following is an example of a PIR and its SIRs:

- PIR: Which paramilitary groups are supporting the current insurgency in the 52ID area of operations (AO)?
- ☐ SIR: (Blue) What routes do the groups use?
 - ☐ SIR: (Red) Where are they storing their weapons and ammunition?
 - ☐ SIR: (Red) Where are their safe houses?
 - ☐ SIR: (Blue) Which religious leaders do they follow?
 - ☐ SIR: (Blue) What are their means of communication?
 - ☐ SIR: (Blue) Who are the leaders of the paramilitary groups?

In this example, it is very clear which pieces of the rather vague PIR are both answerable and actionable.

Those are three different TTPs that units currently engaged in stability operations and support operations are using to ensure that intelligence drives maneuver. None of these examples adhere to the stan-

dard, doctrinal definition of PIRs, but despite some difficulties, units are finding ways for intelligence to drive operations.

Conclusion

The purpose of this article is not to say that the information in "steady state" PIRs are not useful, they are. They contain information that keeps the commander informed of any changes to the environment where he is operating. Those PIRs do not, however, contain adequate specificity to drive operations and are so broad that the units will likely never be able to answer them.

Perhaps "steady state" PIRs in a stability operations and support operations environment should be given the role



Swedish troops confronting rioters in Gracanica, Kosovo.

of broad indicators that will identify when a certain element of the environment is "out of the norm." If we go back to our earlier example of "steady state" PIRs, we know that there will be demonstrations, organized crime activities, etc. Does the commander really want to know when that level of activity is out of the range of normal? Think in terms of how we used to monitor the Inter-German Border (IGB). We knew that we would always have gunnery and maneuver training on the other side of the IGB and we collected on that. Nevertheless, what we really wanted to know was when that level of activity was either above or below a normal level of activity. "Steady state" PIRs should have that type of role.

The commander's information requirement in a stability operations and support operations action is very complicated. The commander must have information on actual enemy combatants and threats to the command as well as such specific stability operations and support operations requirements as the status of electric power and

school construction. Still, in every environment, the commander must have an intelligence system that gives him clear intelligence that drives operations. "Steady state" PIRs do not provide the vehicle for that.

Some may read this article and decide that there cannot be a perfect doctrinal solution to all problems and that units seem to have found a way to make intelligence work for them in their particular stability operations and support operations environment despite a lack of doctrinal guidance. This is a valid point; however, the methods they are using conflict with published current PIR doctrine. This should not be the case.

The U.S. Army has been continually involved in one or more stability operations and support operations actions for many years. It is time for doctrine to codify the best way for commanders to craft their PIRs and decisionmaking in a stability operations and support operations environment.



Endnotes

1. Von Schell, Adolf, Captain, **Battle Leadership** (Quantico, VA: Marine Corps Association, 1988).
2. Editor's Note: **FM 3-07, Stability Operations and Support Operations**, dated 20 February 2003 replaced **FM 100-23, Peace Operations**, dated 30 December 1994.
3. **FM 2-0, Intelligence**, 17 May 2004, page 1-11.
4. *Ibid.*, page Glossary-9.
5. *Ibid.*, page 1-10.

Lieutenant Colonel Joe Nelson is currently the Senior Intelligence Observer/Controller on Team A, Battle Command Training Program. His most recent assignment was as G2 Operations Chief, 1st Cavalry Division and his previous assignments included G2 Operations Officer, III Corps; Chief, CJ2X, Headquarters, Stabilization Force (SFOR); and S3, 303d Military Intelligence Battalion. LTC Nelson was a resident graduate of the Command and General Staff College. He holds a Bachelor of Arts degree in Political Science from Northern Kentucky University and a Master of Science degree in General Studies from Central Michigan University.

Intelligence Synchronization on a Nonlinear Battlefield

by Captain Brian Gellman

The views expressed in this article are those of the author and do not reflect the official policy or position of the Departments of the Army and Defense, or the U.S. Government.

Intelligence synchronization¹ is one of the most important things an intelligence officer has to do. The purpose of intelligence synchronization is to focus efforts to build, refine, or clarify the commander's understanding of the battlefield and the threat. In this article, the author discusses intelligence synchronization in Iraq and proposes a new way of looking at it.

Context

In past conflicts, we often had more information about the threat than a lack of information. We knew who the threats were, knew how they preferred to fight, and understood their doctrine. In this environment, intelligence synchronization focused on answering a few critical intelligence gaps like "*which route will the enemy use?*" or "*when will the enemy initiate the attack?*" This is a typical linear battlefield and this is the type of fight for which we developed our doctrine.

In today's conflicts, such as the Global War on Terrorism in Iraq and Afghanistan, the threat is more difficult to define; in fact, there are often multiple threats working against our forces concurrently. Often there is much more about the threat that we do not know than what we do know about it. This is a classic example of a nonlinear² battlefield. This type of fight is literally the exact opposite of the type of fight for which our doctrine was intended, yet we continue to use Cold War intelligence synchronization methodologies. This is not to say that doctrine for a linear battlefield is outdated; in fact, as a general guideline, it still works. However, to make it work, it takes "outside the box" thinking and relies heavily on analysis.

Current Intelligence Synchronization Methodology

We must relook at how we conduct intelligence synchronization. Priority intelligence requirements (PIRs)

are perhaps the most misused and abused element of the intelligence synchronization plan. The Army as a whole does not understand PIRs, and we as an intelligence community add to that confusion because we use them poorly. An effective PIR links to a decision the commander has to make; it relates to a specific named area of interest (NAI) and is of the utmost importance to the commander, hence the word "priority."

Many PIRs currently used in Operation IRAQI FREEDOM (OIF) do not meet these criteria. There seems to be an unwritten rule that we must have four to six PIRs, regardless of whether they meet the criteria above. There are several reasons for this. First, commanders often feel uncomfortable with too few PIRs. Second, intelligence personnel base intelligence, surveillance, and reconnaissance (ISR) and intelligence synchronization plans on PIRs, so therefore we must have many of them. Finally, collection assets such as presence patrols and other non-intelligence-owned resources—which comprise perhaps 90 percent of all collection—do not care about information requirements (IRs), they only want PIRs.

As a result, we tend to make our PIRs a "laundry list" of very general questions about the multiple threats. These threats are sometimes beyond the commander's ability to affect. The laundry list of threats becomes a set of "standing" PIRs that never close out; they just linger for months at a time. The laundry-list PIR method makes every threat a "priority," and if everything is a priority, nothing is priority.

What I propose is a new way of looking at intelligence synchronization doctrine for a nonlinear environment. Because this is the opposite environment for which our doctrine was developed, we should literally turn the doctrine upside down. We will not always have enough information to formulate four to six PIRs to drive the intelligence synchronization plan; therefore, it is okay to let IRs

drive collection planning. Collection answers intelligence requirements and IRs just as much as PIRs.

Frequently, our PIRs and IRs are very broad and very general. The collection (requirements) manager takes these approved PIRs and creates smaller specific information requirements (SIRs) that ask very specific questions. We then use the SIRs to develop intelligence synchronization plans and task collectors to answer these SIRs; this in turn would help to answer the PIR so that the commander can make a decision. It really is simple; the catch is that in order to develop SIRs, the G2/S2 must understand the threat well enough that he or she can come up with a list of indicators based on threat doctrine, tactics, order of battle, etc.

For example, the commander wants to know if the 13th Brigade Tactical Group's (BTG) main effort is going to attack using avenue of approach A or B. The PIR is *"Where will the 13th BTG employ its main effort?"* NAIs are established at key points within each avenue of approach, information requirements turn into indicators, and collectors are tasked to confirm or deny a set of indicators that would indicate the BTG's main effort. Once the indicators are observed (or not observed), it is reported, the PIR is answered, and the commander can make a decision.

Now try using the same methodology on an example from OIF: The commander wants to know who is conducting attacks against convoys? What is the PIR? *"Who is conducting attacks against convoys?"* Okay, now where are the NAIs? The highways? Not likely. Initially, your NAI can be your entire area of responsibility (AOR). Creating NAIs is a real challenge to the intelligence staff, and cannot occur until the G2/S2 knows what he or she is seeking. What are the SIRs? Since there is no threat doctrine on which to rely and there is very little that you know about the threat, the SIRs are no longer specific but are very general such as, *"Who is emplacing roadside improvised explosive devices, where are they building IEDs, and who is supplying the materials and training?"* Now come up with a set of indicators for these IRs. This is the most important and most difficult task. What is an indicator of an IED maker or an IED factory? These indicators simply help collectors focus or concentrate efforts. Instead of using spe-

cific equipment or the size of an enemy element as an indicator, you have to use atmospheric or demographic information such as a *"large influx of foreigners or mosques belonging to extremist sects."*

Go back to the PIR, *"Who is conducting attacks against the convoys?"* Is this a PIR? Is it linked to a decision the commander can make? Yes. Does it help drive collection? Yes. Can you link it to an NAI? Sure, with some analysis. However, if very little is known about the area, the entire AOR may be the initial NAI. There is nothing wrong with this being the commander's only PIR; however, in my experience during OIF, there will be five more approved PIRs concerned with lesser threats, and these PIRs often will not meet the criteria for a PIR.

OIF-Tested Intelligence Synchronization Methodology

To best illustrate how you can accomplish intelligence synchronization in a nonlinear environment, here is an example of how we managed intelligence synchronization during OIF. This is a battle-tested methodology.

Step 1: Initial Development of Collection Emphasis. Create a list of very broad and general IRs based on your understanding of the threat and the PIRs and IRs from higher echelons. Be sure to involve as many sources in this as possible to increase the variety of subject and perspective. This becomes your "collection emphasis," a group of items the G2/S2 wants to have answered. These will likely be "standing" requirements that will change very little during your rotation. You can have several sets of IRs within the collection emphasis, one for each threat that you have defined. For example—

- ☐ Where are key personalities hiding? Who are their enablers?
- ☐ Where are international terrorists operating? How are they entering the country? Who is financing them? What are their plans for future attacks?
- ☐ Where are the safe havens for the threat?
- ☐ What are the potential political, ethnic, or religious flashpoints within the AOR?

Not all of these will become PIRs. Do not worry about that yet. Continue to develop your intelligence synchronization plan with all of your IRs. (Note that when you are under time constraints, it is imperative

to narrow down this list to a couple of recommended PIRs. Once approved, focus intelligence synchronization planning on those specific PIRs first).

Step 2: Develop the IRs. Each subset of collection emphasis is an IR. Develop a list of SIRs that would help to answer each IR. These SIRs may be very general and may apply to your entire AOR. For each SIR, develop a set of indicators that the collector can use to confirm or deny the SIR. You may base these SIRs and indicators on observed tactics, techniques, and procedures (TTPs), experience, or intuition. Intuition results from the combination of experience and institutional learning. Often intuition is all you have to go on, so do not disregard it. I have based entire intelligence synchronization plans on little else.

Determine which IRs meet the criteria as PIRs—not all of them will. Once this is done, recommend these IRs to the commander as PIRs and develop the intelligence synchronization plan for all the PIRs and IRs. It is important here to stress that you should not base the intelligence synchronization plan solely on PIRs. Some IRs are as important to answer, but are not linked to a decision the commander has to make. Some of your higher headquarters' PIRs will not be PIRs for your unit, but they are still important to answer. This is where you can run into the problem of having overwhelming collection priorities, and it is important to narrow down, prioritize, and task them. You do this in the next step.

Step 3: Develop the ISR Plan. Determine which SIRs are relevant to each of your collectors and which ones the collecting element is actually capable of collecting. Determine which SIRs are "nice to know" and "need to know" to further refine your commander's understanding of the battlefield. PIRs, understanding of the operational environment, and your intuition will help you do this. Turn the "need to know" SIRs into specific orders and requests (SORs) and task the collectors to report answers to these SORs daily. This tells the collectors what the commander needs to know and gives collection focus.

What do you do with SIRs that do not become SORs? At this point, you do not want to inundate the collectors with a flood of questions to answer. However, some SIRs that did not make the cut may help to answer multiple IRs so these should receive special attention in your focus. Perhaps you have a

"pet theory" that is not worthy of a tasking, but you would like more information on it. Take some of these SIRs and place them in the ISR plan as "report as observed." How many "report as observed" SIRs go to subordinate units depends on the number of SORs already tasked. Keep the rest of the SIRs in your internal ISR plan; do not disseminate them to subordinates at this time, bench them. Too many times I saw "monster" ISR plans go down to the lowest level, and collectors can be so overwhelmed that they disregard the entire plan. The art in this portion of ISR is determining how much is enough and including nothing more.

Step 4: Refine the ISR Plan. The G2/S2 should reevaluate the SORs on a regular basis and "report as observed" SIRs based on collection results. The amount of intelligence collected and how dynamic the environment is will help to determine the frequency of reevaluation. In OIF, I did this weekly. Roll up all the answers to the SORs for the period and make an assessment about those SORs. Did the collectors answer them, do they need modification, or should they remain open as they are? Do analysis of the reporting and produce a product summarizing the reporting and your analysis, and disseminate this product both horizontally and vertically. Develop and disseminate the new ISR plan.

Step 5: Action. Two things may lead to this step: that golden nugget of intelligence that falls into your lap or, more likely, analysis resulting from intelligence preparation of the battlefield (IPB) using known information has given the commander enough situational awareness of to act. This is when you may want to develop and disseminate new PIRs. Determine the one or two pieces of information (collection requirements) that the commander absolutely must know to make a decision and be very specific. For example, "Is the target personality at his residence at grid MB12345678?" You may already have answers to SIRs about what time the target is usually at home, but you do not want to raid the target's home unless you know he is really there. Once the collectors answer the very specific PIR, the commander can then say, "Go" or "No Go."

Again, you should have very few PIRs. When a collector receives a new PIR against which to collect, this should be the final piece of the puzzle. Because it is a "priority" intelligence require-

ment, the collecting unit knows that everything else should take a back seat to answering this requirement and that they should report it as soon as the tactical situation permits because it is imperative information.

Application of the New Methodology

Now take the scenario above and apply this methodology. The commander wants to know who is conducting attacks against convoys. This becomes your collection emphasis. Here are some IRs that you can derive and an assessment of them:

- ❑ *Who is conducting the attacks?* This is the overarching question, and should later become the only recommended PIR, with the rest as IRs. SIRs for this PIR may include, *"What anti-U.S. organizations have influence in the AO?"* or *"What individuals are spreading anti-U.S. rhetoric."*
- ❑ *Where is the threat constructing IEDs?* You determine the most likely place is in the mosques. You may want to develop SIRs or SORs as subsets of this IR. Task collectors to report each mosque's location, key personalities, faith, and attitude towards the OIF coalition. This is a good place to start and this collection can begin immediately.
- ❑ *Who are the suppliers of materials and training?* Since this is a very difficult IR on which to collect information, make it *"report as observed."*
- ❑ *Where do most IED attacks happen?* Units report this as friendly force information requirements (FFIRs) and the analysts can then conduct pattern analysis to determine what locations have a high probability of attack. This can help to focus collection and drive operations and force protection measures.
- ❑ *What TTPs are attackers using?* During patrol debriefs after attacks, focus hard on the TTPs used. This can tell you a lot about how the attackers do business and may help to predict or deter future attacks. This information is critical during IPB and you can help to develop indicators of impending attack.

Once you have a volume of reporting, you can start modifying the ISR plan. Reports about the mosques suggest that the town has two suspect mosques. Refine your ISR plan to focus more collection on those sites. If pattern analysis has de-

termined that most attacks occur between certain hours and have similar terrain characteristics, task collectors to observe avenues of approach to and from likely IED locations. You can recommend to the commander some kinetic weapons overwatch on these avenues of approach. (Do not forget applying good old-fashioned IPB for any recommendation, including terrain analysis and enemy courses of action).

After weeks of reporting and analysis, you have determined that a Sheik working out of a particular mosque is training insurgents to build IEDs in that mosque. You know where he lives and his patterns. Recommend a PIR to your commander asking *"Is the target at his residence?"* and disseminate the approved PIR. All elements tasked to collect this PIR will understand the importance of it and will make it a priority. Once the collectors report the affirmative PIR answer, the commander can make the decision.

"Is the target at his residence?" is certainly an SIR. However, in this context and by doctrine, it can be a PIR. By calling it a PIR, you are giving it the importance and priority it deserves.

After a successful or unsuccessful raid, do not forget the most important part of the mission, site exploitation. Before the mission, generate another list of IRs for site exploitation and plug those into your ISR plan, and the cycle of intelligence keeps on rolling.

Link diagrams are an excellent tool to use to determine interrogation questions during sensitive site exploitation. Be prepared to ask the target about any individual or organization that analysts have linked to the target.

Conclusion

Intelligence synchronization on a nonlinear battlefield is not that much different from a linear battlefield, but it is more difficult because there is so much that is unknown. Determine what you know, then focus on what is unknown. Commanders understand that you will not always have all the answers; moreover, they are depending on you as an intelligence professional to provide enough clarity or assessment for planning operations. This starts with a solid ISR plan, ongoing analysis using IPB, and the most important ingredient, intuition.



Endnotes

1. "Intelligence synchronization" was formerly known as "collection management (CM)"; this terminology changed with publication of **FM 2-0, Intelligence**, **FM 7-15, The Army Universal Task List**, and other updated field manuals.

2. Editor's note: Doctrine currently considers "nonlinear" and "asymmetric" synonymous. According to **FM 3-0, Operations**, dated 14 June 2001—

"Asymmetry concerns dissimilarities in organization, equipment, doctrine, capabilities, and values between other armed forces (formally organized or not) and U.S. forces. JFCs [joint force commanders] arrange symmetrical and asymmetrical actions to take advantage of friendly strengths and enemy vulnerabilities, and to preserve freedom of action. Engagements are symmetric if forces, technologies, and weapons are similar; they are **asymmetric** if forces, technologies, and weapons are different, or if a resort to terrorism and rejection of more conventional rules of engagement are the norm. In one sense, there are

always asymmetries between forces: differing circumstances lead to differing military structures. **Asymmetry becomes very significant, perhaps decisive, when the degree of dissimilarity creates exploitable advantages.** Asymmetric engagements can be extremely lethal, especially if the target is not ready to defend itself against the asymmetric threat. Asymmetry tends to decay over time as adversaries adapt to dissimilarities exposed in action. In a larger sense, asymmetric warfare seeks to avoid enemy strengths and concentrate comparative advantages against relative weaknesses." (See paragraphs 4-110 through 4-113 for examples of asymmetry.)

Captain Brian Gellman is currently serving his second tour in OIF. He is the S2 for 3d Battalion, 5th Special Forces Group Alpha. He deployed to OIF after graduating from the MI Officer Transition Course and MI Captains Career Course. His earlier assignment was a branch-detail to the Infantry with the 1st Battalion, 27th Infantry Brigade, 25th Infantry Division (Light). CPT Gellman has a Bachelor of Arts degree in Psychology from the University of Texas at Arlington. Readers may contact the author via E-mail at brian.gellman@us.army.mil.

Doctrinal Solutions

Captain Gellman's article highlights several crucial issues and procedures that recent doctrinal publications should solve.

FM 2-0, Intelligence, published May 2004, incorporated many of the recommendations included in the article. FM 2-0, defines "priority intelligence requirements (PIRs)" in paragraph 1-32 as—

"...those intelligence requirements for which a commander has an anticipated and stated priority in his task for planning and decision-making. PIRs are associated with a decision based upon enemy action or inaction or the battlespace that will affect the overall success of the commander's mission."

Based upon the new definition, PIRs are what the commander needs to know about the enemy or environment. They focus the unit's intelligence, surveillance, and reconnaissance (ISR) plan in order to support the commander's situational understanding. Doctrine ties PIRs to a decision, not to a decision point.

PIRs still focus the unit's overall ISR plan and higher echelons use them in developing their overall schemes of intelligence support. Greater use of intelligence requirements—those requirements for the Intelligence battlefield operating system (BOS) to fill a gap in the commander's and staff's knowledge or understanding of the battlespace or threat—better focus the intelligence support. During stability operations and support operations, these intelligence requirements have greater importance and emphasis.

FM 2-0 provides additional ISR guidance. Chapter 1 details Intelligence synchronization. This section explains staff participation within the synchronization process and the S2/G2's role within the synchronization and ISR integration processes.

FMs 3-0, Operations, **6-0, Mission Command: Command and Control of Army Forces**, and **5-0, Army Planning and Orders Production**, all follow this thread. Units, leaders, and soldiers must incorporate these FMs into their section and unit standing operating procedures (SOPs) in order to benefit from this latest doctrine.

The Search for Weapons of Mass Destruction: Not a New Problem

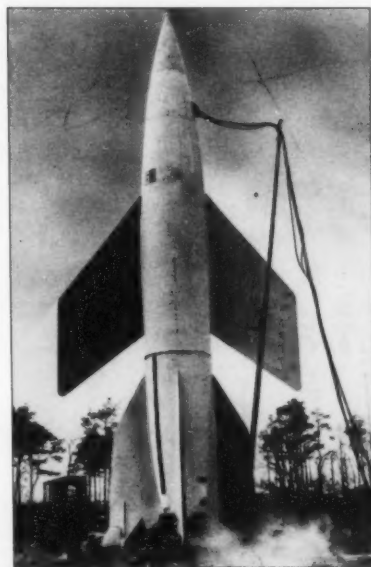
by Thomas N. Hauser

As inspectors search for weapons of mass destruction (WMDs) in Iraq, their task—uncovering hidden laboratories, reading through unending stacks of documents, and screening foreign (sometimes uncooperative) scientists—remains arduous and ongoing even after the conclusion of Operation IRAQI FREEDOM. They are compelled to continue by the possibility of what could happen. The threat, however, is not new to our generation. Catastrophic weapons had long existed in the form of incendiary bombs and chemical agents, but undeniably the atomic bomb ushered in the age of WMD. Presaged in science fiction, the idea of tapping the energy inside the nucleus of an atom had captured the imagination of early 20th century thinkers. The fiction became reality in 1938 when scientists at the Kaiser Wilhelm Institute in Berlin inadvertently split the uranium atom, and the race for the atomic bomb, in turn, began in earnest with the outbreak of World War II a year later.

On the side of the Allies, scientists—many of whom were exiles from the Axis—congregated in the United States to work on the Manhattan Project. The scientists who remained in Germany undertook a similar project that, if managed properly, had the potential to turn the tides of the war. By the close of June 1940, the battles for the European continent had ended in a German victory, which resulted in the occupation of Western Europe. Suddenly, Germany possessed a heavy-water factory in Norway; thousands of tons of high-grade uranium compounds from Belgium; a cyclotron nearing completion in France; a body of chemists, physicists, and engineers; and the greatest chemical engineering industry in the world.¹

Germany's position in the race for the atomic bomb was impressive and alarming. The British, having the most to lose, expressed deep concerns about ambiguous intelligence reports. Through aerial reconnaissance, they obtained and scrutinized thousands of photographs of German military installations under bright lights with strong magnifying glasses. One particular set of photographs alarmed intelligence analysts: the laboratory-like buildings near the town of Peenamünde. The odd-looking ramps with rails next to elongated tubular shapes only confirmed information from previous sources that missiles were under construction. After much discussion and argument, British intelligence analysts deduced only a single purpose for such weapons: clearly, the Germans must have an ordinance so dangerous they would have to carry it in an unmanned vehicle. Such a payload, therefore, would have to be a radioactive substance for the purpose of poisoning the British population or exploding a bomb.²

British intelligence was also acute to German demands for uranium 235, a critical ingredient in the production of the uranium-type bomb. Credible reports had reached Britain from a theoretical physicist in Sweden that Dr. Werner Heisenberg, Germany's leading physicist, was conducting experiments with the intention of exploiting chain reactions of uranium 235. Moreover, an agent working for Norsk Hydro, the Norwegian heavy-water plant in Vemork, west of Oslo, reported that Berlin ordered a vast increase in the production of heavy water—a critical ingredient in a uranium pile.



Presented with evidence of the German V-2 rocket program, British analysts grew concerned over a possible link between atomic weapons and guided missiles.

Photographs courtesy of the National Archives and Records Administration.

Other sources of human intelligence also affected the British conclusion. Niels Bohr—the famous physicist from Denmark who immigrated to Britain after the Nazi occupation because of his half-Jewish ancestry—reported grave concerns about German science. Earlier, Dr. Bohr had been the mentor of Werner Heisenberg; during a visit at Bohr's home in Copenhagen, Dr. Heisenberg confided his feelings about the repercussions of using atomic energy to produce a weapon. Dr. Heisenberg's misgivings suggested that a German atomic bomb was feasible.

Reaching a peak in the summer of 1943, rumors continued to propagate about wonder weapons in Germany, such as *"a new kind of bomb"* so large that an aircraft could only carry one. Such rumors were often included in intelligence reports placed before the chiefs of staff in London. British intelligence had assessed the German uranium project as plausible.³

Without conclusive intelligence, the Roosevelt administration felt compelled to adopt a worst-case scenario as explained by Henry Stimson, the Secretary of War: *"In 1941 and 1942, they [the Germans] were believed to be ahead of us, and it was vital that they should not be the first to bring atomic weapons into the field of battle."* In accordance with this policy, all nonmilitary uranium research halted to enable a concentration of effort on the manufacture of an atomic bomb.⁴

The team working on this issue in the United States was more alarmed about the by-products of German atomic research: even if the Germans could not produce a bomb, a uranium reactor could produce enough radioactive material to use in the same manner as poison gas. During the spring of 1943, the Allies investigated the possibility when Major General (MG) L. R. Groves, the executive head of the United States atomic project, assigned Dr. James B. Conant, chairman of the U.S. National Defense Research Committee, to furnish a report on the feasibility of such a threat. Dr. Conant's response warned that it was *"quite conceivable"* that the Germans could disperse enough radioactive material over several square miles in a city such as London, *"sufficient to require the evacuation of the population."*⁵

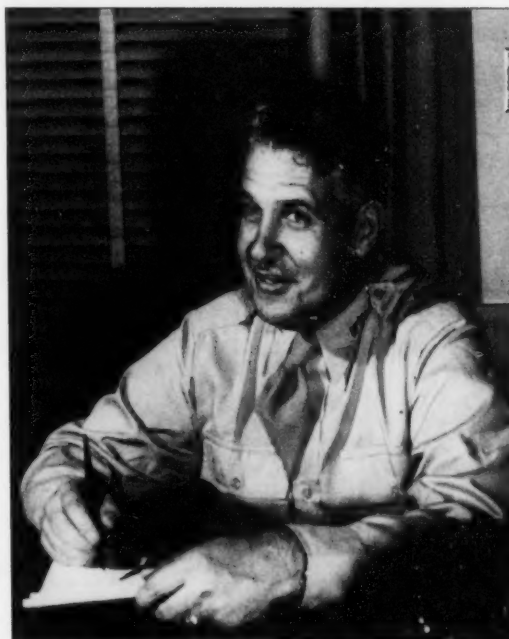
Although opinions varied among intelligence experts about German progress in atomic energy, the Allies took all measures to obviate the worst of possibilities.

The Allies:

- ☐ Restricted all publication of atomic research.
- ☐ Allocated resources generously to the Manhattan Project.
- ☐ Organized commando raids and aerial bombardments against German research and production facilities.
- ☐ Assigned experts in atomic research and protection to accompany invading Allied armies.

The commando raids on Norsk Hydro only succeeded in delaying heavy-water production. Air raids finally coerced the Germans to move all heavy-water supplies into the Reich. MG Groves doubted that the Manhattan Project could produce a bomb to deter any last act of Nazi desperation before the German surrender. Until the Allies captured the German scientists somewhere in the collapsing Reich, the Allied command would never know Germany's position in the atomic race. Both Winston Churchill and Franklin Roosevelt understood the political problem only too well: the production of even one atomic bomb could force Britain and the United States to sue for peace. No Allied leader wanted to discover the extent of German atomic development by witnessing a deadly blast.⁶

Since the U.S. Office of Strategic Services (OSS) and British Intelligence reached no conclusion, Washington decided to give the task of determining German progress in atomic research to the Army. The Pentagon assigned the project to MG Groves who already had a background in atomic security as head of the Manhat-



Major General Leslie R. Groves, Commander of the Manhattan District.

tan District.⁷ The mission was simple: establish a special intelligence detachment to investigate the secrets of German uranium research. MG Groves, realizing the possibility of gathering information as the U.S. Fifth Army advanced up the Italian peninsula, advised the Army Chief of Staff, with approval from the Department of the Navy, to organize a cooperative effort of the Army's G2 (intelligence), the Manhattan District, the U.S. Navy, and the Office of Scientific Research and Development.

The original detachment, consisting of thirteen military personnel (including interpreters) and six scientists, was like no other intelligence unit—a conjoining of military and civilian personnel who could extract, through interrogation, observation, and investigation, detailed information on advanced enemy research projects, including atomic energy. The Army designated the unit “Alsos,” a cover word in Greek meaning “grove,” a play on MG Groves’ name. (General Groves never approved of the name but did not want to make an issue out of it.) MG Groves assigned Colonel (COL) Boris T. Pash, a former California high-school football coach turned counterintelligence agent, to lead the operation in Italy. (COL Pash had made a name for himself when he helped to identify Soviet espionage in the Manhattan Project.) The mission opened a field headquarters in Naples, Italy, on 17 December 1943, and searched through Taranto and Brindisi for signs of German atomic research. Although they interrogated a number of Italian scientists, none related anything of significance. Keeping only a small detachment in Italy to continue investigations in the recently captured city of Rome, COL Pash left for London in early June 1944 to join a reconstituted Alsos, which would accompany Allied forces advancing from their beachheads in Normandy.⁸

Even though the immediate results were disappointing, the endeavor in Italy was not wasted; it helped to establish the Alsos detachment’s lines of authority, responsibilities, and methods of operation. It also demonstrated that while the Army possessed the technical services for intelligence in the theater to satisfy combat requirements, there were no qualified personnel to evaluate scientific information at a much higher level. Furthermore, it showed that Alsos needed more civilian specialists, especially uranium physicists, who knew what to look for in the field and what questions to ask captured Axis scientists. In light of this deficiency, the departmental research and intelligence officials recommended that the Alsos mission should enlarge to include more scientists and continue as a forward unit during the planned invasion of France.

With approval from the Secretary of War, a second phase of the Alsos mission (officially designated Alsos II) was organized to enter a new theater of operations. The cardinal task of the Alsos mission was always linked to



Commando raids in Norway prompted the Germans to move their heavy-water production inside the Reich.

the uranium problem, but the directive was actually much broader. The unit had orders to secure all enemy research with regard to military applications; however, due to its size and composition, investigations were, more or less, restricted to WMD-related fields such as bacteriological warfare, guided missiles, and chemical research.

While COL Pash remained as mission commander, Alsos II incorporated an additional civilian leadership position to take direct control of scientific activities. The Army recruited Dr. Samuel Goudsmit, an internationally prominent nuclear physicist. Beyond his professional background, Dr.

Goudsmit was a preferred candidate for the job because he was fluent in German, French, and Dutch, and had been acquainted with several of the German physicists including Werner Heisenberg. Most important, MG Groves approved of him due to his lack of knowledge about the Manhattan Project—having spent most of his time working on radar at the Massachusetts Institute of Technology, he could not reveal any information of vital importance about the U.S. atomic project in the event of capture.⁹

A letter from the Secretary of War cleared Alsos to operate in the western theater. The unit became an independent force, answering directly to MG Groves, going wherever necessary in the European theater, and overriding all standing orders. Its operatives began wearing a special arm patch, an alpha (for Alsos) pierced by a red lightning bolt—the symbol of atomic research. Only the highest-ranking field commanders actually knew the Alsos mission.

In August 1944, Alsos operatives, entering Paris with the French Army, followed so closely that their jeeps drew fire. In the city, COL Pash found the first important target, Dr. Frédéric Joliot-Curie, a Nobel-prize winning physicist who resided at the Collège de France, the location of the cyclotron particle accelerator. After talking over K rations and beakers of vintage champagne, the French scientist revealed that the Germans had used the cyclotron but he, being part of the French Resistance, did not cooperate in any weapons research. Later, in further questioning, Dr. Goudsmit was able to determine that a number of German physicists were working at the University of Strasbourg; however, he obtained no significant information beyond rumors. Since the Allies could not take Strasbourg until November, the basis of the appraisals was more on speculation than fact. Knowing that the Germans were using the cyclotron—an essential element in atomic research—and hearing of Adolf Hitler's latest boast of "*secret weapons*," Dr. Goudsmit and his colleagues continued to assume the worst.¹⁰

Alsos moved quickly with the Allied advance, investigating targets at Brussels, Antwerp, Marseilles, Eupen, and Eindhoven. Operatives interviewed Gaston André, the Director for Uranium of Union Minière in Brussels, who confirmed that German chemical companies such as Auer and Roges GmbH had purchased more than one thousand tons of uranium from crude ore to refined alloy. Sixty-eight tons of uranium oxide remained, which the Alsos team had packed into wooden barrels and disguised as a whiskey shipment to the United States. Meanwhile, Dr. Goudsmit continued to follow leads in Paris. With information from the OSS, his investigation led him to an abandoned building previously occupied by a German technical spy ring disguised as a chemical company. From an examination of the contents in wastepaper baskets and sample bottles, he found that the Abwere, German Military Intelligence, had been collecting information from the research of French physicists. The evidence, so far, suggested that Germany was a contender in the atomic race.¹¹

COL Pash remained anxious to find more substantial evidence. Following the Allied advance through Holland (Operation MARKET GARDEN), Major Robert Blake, an Alsos agent, was to obtain a sample of water from the Rhine River to use in determining if the Germans were using its water as a coolant in plutonium production. Blake struggled to reach the middle of the famous "bridge too far" during the German counteroffensive; soldiers on both sides must have been bewildered to see a soldier amid heavy fire lowering a rope and bucket into the river below.

The entry of General George Patton's Second Armored Division into Strasbourg at least partially allayed Allied anxieties. Alsos teams entered the city on 25 November 1944 in an uncertain military situation and with shells still falling. COL Pash quickly secured the target sites and apprehended seven German physicists in what turned out to be the most fruitful Alsos operation. Dr. Goudsmit proceeded to examine the papers, diaries, and letters in the



Interrogations of scientists and technical personnel, such as this Dutch engineer, provided invaluable leads in the search for WMD.

home of Carl-Friedrich von Weizsacker, a prominent physicist who had long since escaped into the Reich. As he read by candlelight, he discovered a letter that revealed that the Kaiser Wilhelm Institute, where the Germans were conducting the bulk of their research, had recently moved from Berlin to the small village of Hechingen in the Black Forest. Another letter addressed to Dr. Heisenberg described exactly what problems the Strasbourg group was trying to solve with regard to uranium research. Moreover, other correspondences indicated that from large-scale experiments, the German physicists were unsuccessful in their attempts to separate Uranium 235. To Dr. Goudsmit's relief, the Germans had no real atomic program; they had not even achieved a self-sustaining chain reaction, a feat the Allies had accomplished in Chicago by December 1942.¹²

Regardless of this significant find, the Allied leadership still needed Alsos to secure what remained of all German research into WMD. Dr. Goudsmit admitted that he could not be absolutely certain of anything, and as long as Germany had scientists of Dr. Heisenberg's stature, the possibility of producing one bomb in desperation still existed. In addition, other forms of WMD required further investigation. The Alsos team also found the clinical research of Professor Eugene Haagen, a ranking virus expert in bacteriological warfare; therefore, a "dirty bomb" with biohazardous or radioactive material mounted on a missile (V-1 or V-2) remained as an imminent threat. Furthermore, it was not in the interest of the United States or Britain to allow any German weapons research to fall into the hands of the Soviets or the French who, according to agreement, were to have a zone of occupation.¹³ Thus the mission (officially designated Alsos III) extended and reorganized to operate with the Allied advance through Germany.

The German counteroffensive in December 1944 delayed the Allied offensive until February 1945. When the Allies finally penetrated the interior of the Reich, Alsos operatives went to investigate the university cities of Aachen, Cologne, and Bonn along with the huge I. G. Farben Industries plant. More important objectives included the German research centers in Heidelberg and Hechingen where scattered fragments of the Kaiser Wilhelm Institute continued to conduct uranium experiments.¹⁴

Upon receiving word that the battle for Heidelberg had begun, COL Pash, in keeping with his reputed audacity, decided to make an unescorted dash into the town. From there, the Alsos team moved to Stadtilm where they secured one of the two uranium piles remaining in the collapsing Reich. The larger of the two piles, the one at Hechingen, where Werner Heisenberg was reportedly operating, was in territory designated for French occupation. Keeping the material and equipment out of French hands became MG Groves' priority. To secure the scientists, documents, and equipment, Alsos had to occupy the town and evacuate scientists and equipment ahead of the advancing French units. With an engineer company at their disposal in a mission codenamed Operation HARBORAGE, COL Pash and Dr. Goudsmit hastily entered the town, finding most of the scientists at a local inn. They secured a nearby cave containing a secret laboratory and the last uranium pile, and absconded with all critical evidence of atomic research as the unsuspecting French units moved through. To Dr. Goudsmit's alarm, however, Werner Heisenberg was not among the scientists; the Alsos team could not allow him, of all the physicists, to fall into Soviet hands. Fortunately, COL Pash was able to reach Dr. Heisenberg's residence, where he had been hiding from SS patrols and marauding Wehrmacht deserters amid the chaos of collapse.¹⁵

The Alsos mission was a success. COL Pash and his team satisfied the Allied command's demand for intelligence on German atomic research as it became available. Most of Germany's prominent scientists, research documents, uranium, and heavy water were secure in British or U.S. territory. The threat of WMD would have to wait for another day.

A careful interrogation of the scientists and an exhaustive examination of their documents later revealed a clear decline in development of the German atomic weapons program after 1940. It came to nothing for a number of reasons. The Nazi regime failed to employ the talents of Jewish physicists (many emigrated to work for the Allied nations), or even to recognize their discoveries such as Albert Einstein's theory of relativity. Research programs were often redundant with as many as a dozen agencies, working toward the same goal, competing to win Adolf Hitler's favor. Although the Germans had managed to separate uranium 235 by centrifuge, they did nothing on a large scale.

In contrast to the Allied approach, the Nazi leadership never developed a partnership between civilian science, industry, and military. With only a small uranium pile by 1944, the German physicists, unaware of the

difficulties that lay ahead in producing a chain reaction, could not hope to succeed before the end of the war. According to MG Groves, "their work was seriously deficient in over-all direction, unity of purpose, and coordination between participating agencies."¹⁶ Dr. Goudsmit remembered a leading German physicist's comments in confiscated papers on the lack of central leadership:

*"We have lost the war of the laboratories despite all the good initial conditions, particularly the great talent of the German people for physics and research...the principle reason lies in the lack of a clear organization and in the erroneous selection of organizers according to political instead of objective points of view."*¹⁷

Yet before the Allied invasion of Western Europe, intelligence agencies could provide no confirmation of this condition. The potential to make a bomb certainly existed: Germany, after taking Western Europe in 1940, had the materials, industry, and talent. The motivation also existed since the Third Reich followed an unbounded and aggressive policy of expansion. Analysts and policy makers easily misinterpreted circumstantial evidence—the comments of Niels Bohr after his conversation with Werner Heisenberg, Adolf Hitler's boast of super weapons, the development of the V missiles, shipments of heavy water and later uranium to Germany, and rumors of German uranium experiments. In the end, the Allies decided to err on the side of caution by pressing forward with their own atomic project and the Alsos missions.



Endnotes

1. Irving, David, *The German Atomic Bomb: The History of Nuclear Research in Nazi Germany* (New York, NY: Simon and Schuster, 1967), page 72.
2. MacPherson, Malcolm C., *Time Bomb: Fermi, Heisenberg, and the Race for the Atomic Bomb* (New York, NY: E.P. Dutton, 1986), page 181.
3. Irving, pages 102, 179, and 185; MacPherson, pages 160-1.
4. *Ibid.*, page 101.
5. *Ibid.*, pages 182-3.
6. After the war, Dr. Goudsmit found that the Germans had managed to collect enough heavy water from Norsk Hydro to continue their experiments. Goudsmit, Samuel, *Alsos* (New York, NY: Henry Schuman, Inc., 1947), page 9.
7. The Manhattan District, as part of the Manhattan Project, was the physical area, the personnel, and the equipment that supported construction of the atomic bomb. Because research, resource, and production facilities for the Manhattan Project were spread across the United States and Canada, the Army Corps of Engineers decided to create a district without boundaries and named it the Manhattan District.
8. Groves, Leslie R., *Now It Can be Told: The Story of the Manhattan Project* (New York, NY: Harper and Row, Publishers, 1962), pages 185, and 191-192; and Pash, Boris T., *The Alsos Mission* (New York, NY: Award House, 1969), pages 11, and 32-34.
9. Goudsmit, page 15; and Pash, pages 34, 36, 38, and 39.
10. Groves, pages 212-213; Pash, page 59.
11. Groves, pages 218-219.
12. Goudsmit, pages 70-71.
13. Pash, pages 157-9.
14. *Ibid.*, page 169.
15. Goudsmit, pages 95, and 112; Groves, page 243; Pash, pages 179 and 217; MacPherson, page 280.
16. Groves, page 244.
17. *Ibid.*, page 244; and Thiesmeyer, Lincoln R. and Burchard, John E., *Combat Scientists* (Boston, MA: Little, Brown, and Company, 1947), page 181.

Thomas Hauser is currently Staff Historian at the Headquarters, U.S. Army Intelligence and Security Command (INSCOM) History Office. He earned a Bachelor of Arts degree in History from the University of Virginia and a Master of Arts degree in History from James Madison University. Readers may contact the author via E-mail at tnhouse@inscom.army.mil and telephonically at (703) 706-2630.

Generational Differences in Waging Jihad: *Minds Unalike*

by Chief Warrant Officer Three Sharon K. Curcio, USAR

The views expressed in this article are those of the author and do not reflect the official policy or position of the U.S. Departments of the Army and Defense, or the U.S. Government.

Author's Note: This article is based on reading more than 600 narratives (from November 2003 through July 2004) of detainees at Guantanamo Bay, Cuba. The information presented here is observational and anecdotal in nature, but attempts to capture, in general, conclusions about the experiences of the young men from many countries recruited to fight for Islam, and to support the Taliban in Afghanistan. The anecdotal collections reflected here do not reflect the comments or opinions of one group of young men at Guantanamo: the former bodyguards of Osama bin Laden. Most of the bodyguards had college-level experience in Islamic Studies and were or are ideological extremists. Conclusions presented here would stand up to further scrutiny and quantification (within certain parameters) if one applied a methodology.

Given the accounts of many young men who went to participate in jihad in Afghanistan, the unexpected became routine. For the purposes of this article, the definition of "young men" is a group between the ages of eighteen to twenty-five. Many of the young detainees stated that a number of "they never told me" events and experiences occurred. They were left to deal with circumstances for which they had not been prepared, let alone the unthinkable situation of imprisonment. As one pours through the stories of young men who left to go to a training camp, and engage in the jihad in Afghanistan, a number of young men left comfortable lives in the Gulf States, Saudi Arabia, or Western Europe. Their travels and actual training and combat led them to encounter what had formerly been improbable in their lives. Only in the aftermath would many admit how difficult the unforeseen had been.

Recruitment

Many of the young men were motivated to leave home for Afghanistan, Chechnya, or Palestine due to the influence of Imams and recruiters in their local mosques. The recruiters used visual displays of persecuted Muslims well, and recruits routinely had exposure to films that featured suffering women and children in refugee camps in Chechnya, Palestine, or Afghanistan. A number of young men also reported hearing messages on the radio about conditions Muslims faced in many areas of conflict and stated that radio messages prompted them to inquire about travel to these areas to teach and to deliver aid. These persuasions were used to motivate the young men to go to Afghanistan to—

- ☐ Perform "zakat" (i.e., provide charitable donations to help widows, orphans, and refugees).
- ☐ Teach the Koran.
- ☐ Visit a country governed by "Sharia" (strict Islamic rule).
- ☐ Perform one's duty as a Muslim male and learn to use weapons to protect one's family.
- ☐ Help Muslim brothers fight off oppressors.
- ☐ Fight against the West, and stop the corruption that threatens Islam everywhere.

Equally compelling were the other reasons young Islamic males would want to leave home:

- ☐ Unemployment.
- ☐ A failed business.
- ☐ A criminal record with impending jail time.
- ☐ A drug or alcohol problem.

Unemployment motivated a number of Gulf States detainees, particularly young unskilled and semiskilled laborers who were out of work. For them, going on jihad was "alternative employment." In contrast, educated young Saudis departed for jihad motivated by a sense of self-discovery and challenge. Recruiters touted and sold them on going to observe a "pure" Islamic state such as Afghanistan. This proved to be a great hook for more idealistic and wealthier youths. A number of young Saudis with college-level education left on jihad, not because they had economic or academic difficulties, but to see how the Taliban had put the rule of Islam (*Sharia*) into motion in Afghanistan in contrast to the Western-tainted Saudi monarchy they despised. Off they went, the religious and political alike. Jihad was a chance to put their spiritual and physical lives together, and the Imams were clear in their messages to both seeking and disenfranchised youths.

The year 2001 was a banner one for recruiting young men for jihad. Recruitment intensity ran strong, with imams and recruiters busily sending boys on jihad. Yet leading someone to an experience purposely not detailed amounts to betrayal. Many young men later discovered in the training camps of Afghanistan, in the caves of Tora Bora, and in the prisons of Pakistan, that they had undertaken a journey that no one had realistically explained. The recruiters and imams had purposely omitted the risks to avoid discouragement, and the rewards promised were intangible. A few said they went to receive pay as a cook or a driver for the Taliban or a nongovernmental organization. A greater number of the young men had little problem saying "yes" to jihad; however, ten to twenty percent of the group admitted that they never told their parents that they were leaving home.

Several interrogators did ask the young men they interviewed whether they had ever left home before going on jihad. One young Saudi said that before going to Afghanistan, he had been permitted to go shopping (once) in Bahrain. While it would be inaccurate to say that all young men had such limited travel experience, the Gulf State and Saudi detainees for the most part were not widely traveled. Some Saudis took pleasure and leisure trips out of the country; fewer Yemenis could afford to do so. Many young detainees mentioned being recruited via the "*hajj*" experience. The *hajj* is a pilgrimage to Mecca with religious activities that last a week or more. Hence, their introduction to the idea of leaving for jihad was in the context of a pilgrimage. More than one clever al-Qaeda recruiter used the *hajj* to connect a young man to his next pilgrimage: jihad. Of course, embedded in jihad are elements seductive to young adults: the rite of passage into manhood and the clear demonstration of one's commitment to Islam, the religion of one's fathers.

Training Camps

Getting the Saudis or the young men of the Gulf States on the road to attend training proved to be difficult. Hence the need for those who facilitated the jihadist mission. While extensive travel in many foreign countries and the ability to speak several languages characterized recruits from Europe and Africa, young men from the Gulf States and Saudi Arabia had traveled less extensively. When they did travel, they were more likely to travel in pairs or in a group. The European and the North African recruits displayed more ability to get around alone, and negotiated their travels more independently, while the Gulf States and Saudi detainees clearly needed a facilitator's help. These facilitators made sure that the right persons in the right places intercepted the young men and ensured they reached their training destinations. Al-Qaeda and other training facilities in Afghanistan were language-specific. Al-Qaeda trained Arabs. Libyans trained North Africans. Uzbeks trained other Uzbeks and Tajiks. Since a shared language speeded up learning, training camps were organized by language group.

Leaving the West European or Saudi health care system behind and going to Afghanistan meant abandoning the medical system to which one is accustomed. Detainees reported becoming ill at camp within the first month. Interestingly, the detainee narratives do not mention "group illnesses" where many got sick at the same time. What the narratives frequently state is that one came down with malaria and dysentery while in training and these and other illnesses lasted for months. The narratives of the Central Asians, Europeans, and Africans mention sickness experienced at the training camps less often. Gulf State and Saudi recruits talk about extended, debilitating illnesses, which prevented them from finishing training and left them useless for combat.

A few said that they left training, and headed to the Pakistani border alone to reach medical treatment. The perception was that Pakistan offered real doctors and medical facilities whereas Afghanistan did not. Some

tried to return home for treatment. Others said that when they became seriously ill at camp, they were removed to a safehouse or to a hospital (particularly one at Konduz, Afghanistan). The camps could bandage a wound but had no other medical supplies. The detainees were quick to realize that those in the camps "practicing medicine" were not real doctors. Therefore, sick detainees used an unusual amount of initiative when it came to leaving a camp to seek medical attention.

When U.S. soldiers leave for war, many stand in line for vaccinations before departing to the war zone. It is odd that the recruiters in Saudi Arabia or Yemen allowed young men to leave for a destination without vaccinations for common illnesses (malaria, yellow fever, or tetanus, for example). Older detainees who had experience with an established military (Syrian or Egyptian, for example) received medical care through their respective militaries in the Middle East.

Why would a sophisticated group like the al-Qaeda allow recruits to go to a country with unsafe drinking water and no sanitation without vaccinations? Al-Qaeda adopts other Western innovations such as plastic explosives, but seems to eschew the medical aspects of our technology. They knew what conditions and diseases recruits would encounter in Afghanistan, yet refused to inform them of the possible health risks or to vaccinate them. They spent money for jihad on airplane tickets, hotel reservations, and communications to safehouses and training camps, yet al-Qaeda risked, and lost, an incredible amount of manpower and man-hours as recruits fell ill in Afghanistan.

It could be that al-Qaeda did not use the medical technology available to protect soldiers because winning jihad means massing and using recruits. Death for the cause of Islam and martyrdom were glorified, hence al-Qaeda had "license" to throw bodies into the fray. The more, the better, and the will of Allah would determine who would withstand illness and who would succumb. As many as a one-quarter of those in training camps report getting an illness and suffering with it for months. By overlooking the medical underpinnings of a military operation, al-Qaeda had far less actual manpower than the number of recruits suggested. Sickness dramatically reduced al-Qaeda's ability to help the Taliban effectively and to stop the advance of the Northern Alliance.

A number of young men have frightening memories of the sicknesses they endured in training camps or on the battlefield. Many reported feeling depleted and vulnerable and said that the camp food was mainly gruel. The recruits received a subsistence diet, but their trainers expected them to participate in the "rough" physical conditioning at camp. Physical output and the lack of nutrition undoubtedly weakened the immunity of many, and they more readily succumbed to illnesses. Perhaps ten to fifteen of the detainees recall being arrested at a hospital in either Pakistan or Afghanistan. Many were unsure as to how they got to a medical facility; some recalled that a local took them. Many did not know how long they had been at a hospital. Later, when identified as Arabs or as foreign fighters by those at the hospital, the Northern Alliance or a Pakistani authority promptly arrested them, and later transferred them to the U.S. forces.

The Stripping of Identity

Recruitment for jihad often necessitated the need for an alias. Although young men did not take a "*kunya*" at the beginning of their travels, many settled upon a name by the time they reached the last safehouse used before arriving at a training camp. Supposedly, this new name gave a measure of safety to the new recruit and protected his identity as well as that of his family. The Taliban arrested and imprisoned those they considered spies; al-Qaeda was also vigilant concerning spies. Recruits, therefore, willingly chose a "temporary" name for use during travel, training, or battlefield assignments.

While they adopted a new identity, they were asked to surrender to a designated recipient at one of the last safehouses used before training camp arrival any passports or national identification cards they had that linked them to their former selves. The recruits seemed to have no problem with this, expecting that it was better to give up the documents rather than lose them. They also took for granted that they would get these documents back when training, or their participation in jihad was over. Trust accounts for pass-

ports and other ID were set up with a number given to each recruit by his real name. The recruits never questioned whether the passports and identification documents that they left in safekeeping would remain in the locations where they had initially left them.

"Nothing" Will Happen Next

While recruits assembled in Afghanistan to support the Taliban against the Northern Alliance, the attacks of 11 September 2001 occurred. Some recruits were still in training camps; others were on the front lines where there had been little or slow action. All seemed to feel a part of something larger than themselves. When news of 11 September reached the young men in training camps or posted on a Taliban line, it was standard for the younger men to ask their older, experienced trainers or former Soviet mujahideen *"what is going to happen next?"* The universal answer given by the older men to the younger was *"nothing,"* so many young men shrugged off any worry of post-11 September calamities. Many were aware that the Taliban had been hosting Osama bin Laden and that he had moved freely among the training camps; many had heard him speak at various camps. Universal consensus was that if Islamic brothers had exploded a U.S. skyscraper, it was a good day for Muslims everywhere. Islamic brothers had brought down a symbol of the West. Osama bin Laden had won a victory, and nothing would happen to a foreign fighter in Afghanistan.

However, what were their grounds for the universal answer *"nothing"*? After the Khobar Towers incident in Saudi Arabia, or the USS Cole incident, the United States did not demonstrate strong retaliatory action. Therefore, the *"life experience"* answer the older fighters passed on to the younger ones seemed sufficient. Al-Qaeda also did not want to alert the young recruits that a larger, more dangerous game may have just begun, which certainly would have caused some young men to abandon al-Qaeda's intended military operation and leave. Whether *"nothing"* stemmed from the lack of U.S. action in the past or al-Qaeda's deception to keep the troops calm, *"nothing"* was the answer many youths accepted as they, the former Soviet mujahideen, and the fighters from Bosnia-Herzegovina and Chechnya sat patiently together on mountain slopes in Afghanistan and waited to fire upon the Northern Alliance. They expected nothing to interfere with their waiting and thus far, history had proven them right.

Six weeks after 11 September 2001, the United States in Operation ANACONDA began dropping bombs on the alleged sites of al-Qaeda and other extremist training camps in Afghanistan. By mid-October 2001, recruits from Europe, Africa, Central Asia, Saudi Arabia, and the Gulf States who once had been told *"nothing will happen"* were now running for their lives. One detainee explicitly said that when he looked up and saw U.S. airplanes, he did not want to fight the Americans. Many knew that they had signed up to fight the Northern Alliance, but did not bargain on the United States entering the fray. The older men who had said that nothing would happen were now desperate to leave Afghanistan. Arabs were told to leave Afghanistan as soon as possible because there was a price on their heads.

Many young men sought cover in the Tora Bora Mountains but were caught in the bombing and suffered shrapnel wounds or lost limbs; they endured single and double amputations later. Several reported stepping on mines in Afghanistan and losing a leg. Many were now living in caves in the Tora Bora Mountains, not dressed for the cold weather, not sure of where the supplies were or of the people with whom they were living. One African fighter in his mid-thirties had his fingers amputated from the frostbite he endured in Tora Bora. Many report that they hired Afghani guides to get them out of the mountains and spent many days on foot trying to reach the border. In escape, they formed small groups. Most ditched their weapons as they tried to cross the Afghanistan-Pakistan border. Others wounded in the border area recall a local Afghani transporting them somewhere else for more medical help. Some recall being rounded up and betrayed by Pakistanis who sold them to the Northern Alliance. Several remember terrible experiences in Northern Alliance prisons. Others report that they could have purchased their freedom from the Northern Alliance but did not have enough money to satisfy the price demanded. A number of detainees admitted that if they had known what they had to face in jihad, few would have participated unless it meant the direct defense of their homelands.

Stranded in Jihad

It was not until the U.S. bombing scattered the young men in the Arab units supporting the Taliban that the issue of national identifications and passports surfaced again. As they tried to escape Afghanistan and cross into other countries, many regretted not having their official papers with them. Most knew where they had left their passports or ID cards, but had no hope of going back to that safehouse to retrieve them. Initially, most thought that having a false name and no identification would make it more difficult for the arresting authority to prove that they were Arab. On the other hand, some thought that having a passport would pave a way to their respective embassies. Interestingly enough, forged IDs or passports were rare; "foot soldiers" rarely possessed forged documents. Al-Qaeda usually procured these (for a fee) for higher-level operatives. Those who had kept their IDs or passports, however, were very likely to be the genuine owners of these documents and had chosen not to surrender them at a safehouse. Even if one had a passport or national identification, there was no guarantee that either would get an arrested foreign fighter taken to his respective embassy.

After the fall of Kabul, a number of the detained Arabs said that that locals warned them to leave Afghanistan, since foreign fighters were subject to apprehension and arrest. Many detainees hired Afghani guides to find routes to cross into Pakistan from Tora Bora or wherever else they were. Many detainees said that not having passports, identification, or other travel documents heightened their fears of being isolated, trapped, and stranded in a hostile place. One young detainee commented that when it came to getting Arabs out of Afghanistan into Pakistan safely "*Al-Qaeda took care of their own.*" He obviously noted that some escapees appeared to have had prior planning and their escapes went smoothly while others were caught in a nightmare.

Arrested Arabs did not usually reach their embassies in Pakistan. What is more interesting, however, is that many embassies in Pakistan did not attempt to locate their nationals arrested as foreign fighters. There is no evidence (in official U.S. records) to indicate that the Saudi government made a special request to the United States, Afghanistan, or Pakistan to permit their representatives to access detention centers or prisons for identifying their nationals or for securing release for some of them. One Saudi representative was observed outside a prison near Kandahar, Afghanistan. It is not known whether this representative was passing through the area on some other business or whether he was sent specifically to examine the prison. This representative did not talk to any of the Saudi detainees. The more sophisticated Gulf State and Saudi recruits seem clear about why their governments did not look for them. On the other hand, the more naïve recruits—who were the jihadists—insisted that they deserved support from their governments for fighting for Islam. They were quite disappointed when they did not receive it. Naturally the Saudi government would have little interest in expending effort to release from detention either troublesome al-Qaeda members or jihadists. Each extremist group opposes the current Saudi monarchical government but for a very different reason.

The Unknowns of Capture and Captivity

Perhaps the greatest shock that young men on the battlefield, hiding in caves, or in hospitals faced was capture, followed by a series of detentions with different authorities prior to transfer into U.S. custody. The young men who were in prisons in either Afghanistan or Pakistan recall rough handling during interrogations and in daily treatment. A few observed that other prisoners disappeared from their midst. Whether these men were released or murdered remains unknown.

A few were witnesses to the fact that a few men detained at Guantanamo had indeed been interrogators and torturers for the Taliban and had mistreated them in previous confinements. A handful of young men in detention described surviving the Mazar-e-Sharif uprising. Although shot twice, one crawled to the basement of the Mazar-e-Sharif compound to hide; he survived a week of explosions and underground flooding, and emerged alive.

The experience of a long detention in a foreign land was one outcome of jihad that no jihadist appeared to have anticipated. Imams in their "*fatwas*", recruiters, and trainers spoke of martyrdom on occasion, but no

one mentioned imprisonment. One key al-Qaeda operative in confinement elsewhere talks longingly about the martyrdom he missed. The older generation had omitted dealing with imprisonment from recruits' preparation for jihad; they expected those recruited to achieve (and win) the jihad through martyrdom. Even if jihad were lost, one could still be a martyr for the cause—but a prisoner? Quite unthinkable. Recruits were never warned of the hardships of incarceration from a generation that simply drummed up bodies for the purpose of Jihad. Experience marks one, whether through the physical scars of battlefield wounds or the emotional scars of separation, loss, and death. The scars of experience from what recruits never heard run deep in the young men held at Guantanamo.

Does the experience of captivity and imprisonment change the younger soldier more than the older? Are the younger jihadists more likely to take action against the United States once released, or will the older men be more likely to do that? Will a prison experience leave the younger men more likely to again engage in jihad against the West, or refuse its call? What is striking is that a number of detainees have already psychologically re-framed their jihad experience (which resulted in prison)—there are now new parameters for engaging in jihad. Some said that they would only go on jihad again if it meant "homeland defense." Several said that they would never participate in jihad again. Others said that they had now fulfilled their obligation to Islam, and need not go on jihad again. Perhaps one in four of the young detainees would go on jihad again, but the greater portion of them would not. Also noteworthy is that a greater proportion of the older men, in contrast, seem likely to engage in jihad again.

Final Thoughts

While there is no clear-cut answer as to whom U.S. forces will fight next as the Global War on Terrorism continues, scrutiny of those detained at Guantanamo provides insight into the minds of those likely to be recruited in the future. Representatives from nations with a large Islamic population have indicated that as many as one-third of all jihadists are "hard core." The older men are more fundamentalist Islamic extremists than younger men are because their religious beliefs and behaviors are more deeply ingrained. They more often have difficulty in dealing with any kind of change. Saturated with radical Islam beliefs and precepts, the older men are not as amenable to "rehabilitation," that is, adopting the practice of a more moderate Islam. Expect them back, even at a more advanced age, in the global fray.

The younger men, on the other hand, show less rigidity in belief and behavior. They have already begun to show more fluidity in thinking as they re-frame jihad. Recall that a number said that one jihad was all it took for them to fulfill their obligation to fight for Islam. The younger men are clearly are more receptive to change. If there is any group worth the effort of a carefully planned psychological operation (PSYOP) effort to show them to the dark side of jihad, it is clearly the younger men. Intensive PSYOPs (which can be accomplished with relatively low-cost communications campaigns) can expose young Islamic males to the as yet undisclosed horrors of jihad. For example, picture would-be jihadists shown photos of their post-jihad peers with limbs missing. While such a campaign may not keep all youth off the Global War on Terrorism battlefield, reducing their rate of repeat participation in jihad, and reducing the overall terrorist headcount may prove effective in saving U.S. lives.



Endnote

1. A "fatwa" is a learned formal legal opinion (religious ruling) produced by a "mufti" (specialist in Islamic law) or, in *Shia Islam*, by a *mujtahid* (an Islamic jurist). It can have the force of law.

Chief Warrant Officer Three Curcio, U.S. Army Reserve, has been a military intelligence analyst for seventeen years; she is presently a 350B (Senior Intelligence Analyst) assigned to the 368th MI Battalion (USAR). She has a Master of Business Administration degree in Marketing from Washington University in St. Louis, Missouri, and a Bachelor of Arts degree in English and History from Carnegie-Mellon University in Pittsburgh, Pennsylvania. CW3 Curcio worked in corporate marketing on the East coast for ten years before moving to Southern California where she works in secondary education. Readers may contact CW3 Curcio via E-mail at skc888@verizon.net.

Intelligence Support to Marine Corps Combat Operations in Afghanistan

by Major Christopher L. R. Fatheree, USMC

"Rich, high density, time sensitive, complex processing of data that is in high demand by fast paced consumers (e.g., USMC commanders) must be forward or it will be irrelevant."

—Major Drew Cukor, USMC¹

Intelligence reachback is not the answer to all intelligence-related problems. It has its pros and cons, but when used effectively, as in the case of Task Force 58 (TF-58), it can facilitate one's ability to produce timely, accurate, and useful intelligence to support operations planning. Modern technology and communications provide nearly continuous connectivity between deployed forces and the entire intelligence community throughout all levels of security classification. Intelligence reachback—the process of using this capability to exploit the personnel, resources, production capacity, and specialty skills of intelligence organizations geographically displaced from the deployed forces—allows intelligence personnel closest to the fight to concentrate on analysis and supporting the commander.

Although intelligence reachback provided significant support to TF-58's combat operations in Afghanistan during Operation ENDURING FREEDOM (OEF), the presence of intelligence analysts forward was critical to mission accomplishment. The actions of TF-58 during OEF provide an excellent illustrative example of how Marines incorporated intelligence reachback, made possible by improvements in technology and communications over the past decade, to overcome the unique staffing and employment of Marine forces during amphibious operations. During both the planning and execution of operations in Afghanistan and Pakistan, reachback enabled forward-deployed analysts within the intelligence sections (S2) of two Marine Expeditionary Units, Special Operations Capable (MEU (SOC)) to support not only their respective organic units, but also a higher headquarters (TF-58), adjacent U.S. forces, and coalition forces.

Despite TF-58's achievements, there exists the possibility that one could misperceive from this successful use of Marine amphibious forces that they could accomplish intelligence reachback without in-

telligence analysts forward. This misperception combined with a misunderstanding of how the intelligence process works can create a dangerous misconception of what occurred in Afghanistan. Recent remarks from a high-ranking Marine Corps officer raise several questions about how some leaders may believe TF-58 employed intelligence reachback during those operations. The most disturbing aspect of these comments is the possible belief that analysts *"were not located forward in Afghanistan."*² On the contrary, the best and brightest analysts performed from within Afghanistan while TF-58 conducted operations. This article will explain the processes used to provide intelligence support to TF-58 and identify those potential problem areas of reachback that all future joint task force (JTF) commanders must consider when establishing their joint staffs.

Limited Resourcing Necessitated Reachback

The genesis of TF-58 stemmed from a U.S. Central Command (CENTCOM) planning order to conduct raids into Afghanistan issued on 30 October 2001. At its inception, the task force (TF) personnel roster consisted of six Marines from three separate and distinct units:

- ❑ Headquarters, I Marine Expeditionary Force (MEF).
- ❑ Headquarters, Marine Forces, Central Command, Tampa (MARCENT Tampa).
- ❑ Combined/Joint Task Force, Consequence Management (C/JTF CM).

Recognizing the requirement for additional personnel, the commander of TF-58, Brigadier General James N. Mattis, issued guidance for establishing a larger headquarters staff.

*"The Commanding General's (CG) guidance on 'growing' the staff was simple: he wanted a small staff comprised of aggressive officers who were able to act with initiative, make rapid decisions and recommendations, and exercise good judgment."*³

Additionally, Vice Admiral Charles W. Moore, Commander, U.S. Naval Forces Central Command

(NAVCENT) and Combined Force Maritime Component Commander (CFMCC), made his intent clear that he could not support a large staff with communications, office space, or even a command ship. The staff would remain small and focus on the planning necessary to "Conduct a minimum of three to five raids into Afghanistan over a 30-day period," as stated in the NAVCENT Warning Order of 1 November 2001.

The unique staffing of the TF-58 N2 (intelligence section) required innovative techniques for providing intelligence support to the operating forces. The intelligence section of TF-58 gradually grew from zero during the first week of November to seven by D-Day, 25 November 2001. These individuals—four officers and three Marine linguists (with no formal training in intelligence)—found themselves hard-pressed to provide the type of intelligence needed to support a force consisting of the Task Force 58 Headquarters, two MEU (SOC)s (the 15th and the 26th MEU (SOC)), and the coalition forces assigned to TF-58. Unable to provide analysis or intelligence products on their own due to the irregular staffing limits, the TF-58 N2 focused its efforts on facilitating intelligence reachback for the MEUs deployed in Afghanistan. Future scenarios involving larger intelligence staffs capable of providing greater organic intelligence support to their commanders may be less reliant on reachback to accomplish their missions. Therefore, one should carefully consider TF-58's unique circumstances before attempting to replicate a similar type organization.

On 8 November, TF-58 established an N2 section (two individuals consisting of a Lieutenant Colonel from I MEF and a Major from MARCENT, Tampa) and immediately prioritized and developed the initial potential targets. The primary areas of interest were the border camps and drug-related facilities located in southern Afghanistan near the Pakistan border. The secondary area of interest fell on the main lines of communication (LOCs) from Kandahar to other parts of southern Afghanistan.⁴

Although not really targets per se, the interdiction of these routes could possibly afford TF-58 an opportunity to engage Taliban forces headquartered in the Kandahar area. These

potential targets initiated the first instances of intelligence reachback from TF-58 to other intelligence organizations. Imagery requirements for drug facilities, potential helicopter landing zones (HLZs), route studies, potential interdiction points along Route 1, assessments of reaction times for Taliban forces from Kandahar to these potential interdiction points, and traffic pattern analyses for this route present several examples of intelligence needed by the TF that a staff of two could not produce. Far from robust enough to accomplish the daunting challenges ahead of them, the TF-58 N2 developed its role as a conduit of information between those organizations that could produce intelligence support and those units that would use it for planning or execution.

Familiar with the organic intelligence capabilities of the subordinate MEU (SOC) S2s (see Figure 1) and understanding the potential of external intelligence organizations willing to assist TF-58, the N2 section provided help where it could. TF-58 intelligence officers—

- Participated in operations planning teams (OPTs) in Bahrain and aboard amphibious ships.
- Provided reporting from maritime patrol aircraft conducting surveillance and reconnaissance.
- Maintained situational awareness among the TF-58 staff.

The most critical contribution from the TF-58 N2, working from within the NAVCENT N2 at Naval

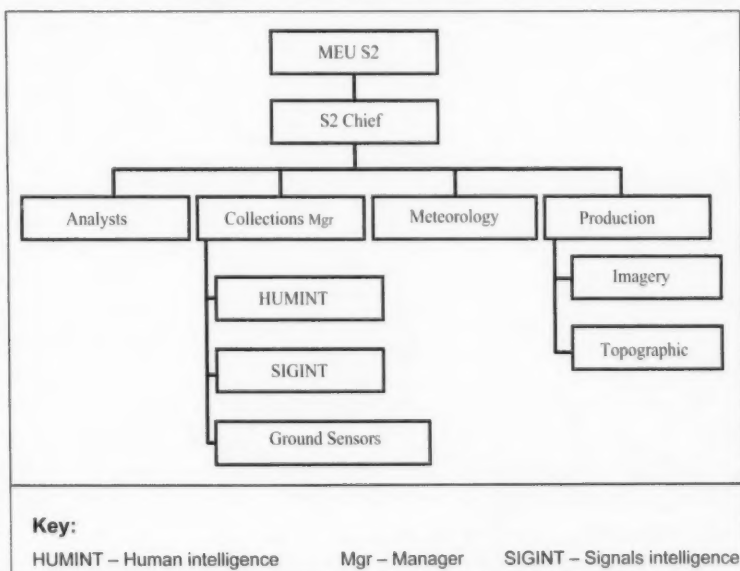


Figure 1. Typical MEU S2 Assets Available For Amphibious Operations.

Support Activity, Bahrain, came in its role as liaison to other commands. The establishment of this vital communication node in Bahrain to facilitate reach-back proved to be critical in the overall success of TF-58 operations.

General Mattis decided not to combine the two MEUs for combat operations. Instead, he employed a supported, supporting relationship between the two forces to conduct operations while simultaneously planning for future operations.

*"The CG's initial intent was to establish tactical positions, defend quickly, and leverage the power of Marine Air-Ground Task Force (MAGTF) aviation and theater close air support (CAS) assets to defeat enemy forces attempting to attack Marine forces."*⁵

Although this initial concept of operations changed rapidly, the decision not to merge the two MEUs remained.

While probably not considered before this decision, the intelligence support aspect of this arrangement proved to be advantageous to all parties considering the limited personnel in the TF-58 N2. Although their respective operations were synchronized with each other, the decision not to integrate the forces greatly reduced the need for extensive coordination between the intelligence personnel of the two MEUs and the TF-58 N2. By designing operations that maintained unit integrity and capitalized on their established standing operating procedures (SOPs), TF-58 preserved the inherent strengths of the self-contained operational organization of the MEUs.⁶ Through this arrangement, each of the MEUs could focus on its respective mission while maintaining an overall awareness of the situation. Consequently, the TF-58 N2 would not need to deconflict support requirements. Whether by luck or the conscientious design of its commander, TF-58 N2's ability to provide intelligence support effectively to its subordinate units revolved around this decision.

As the concept of operations developed, it became clear to planners that TF-58 would need to establish a forward operating base (FOB) in southern Afghanistan if it hoped to conduct any significant operations. The intelligence focus shifted to support this concept by identifying airfields that could potentially support TF-58 operations. The

establishment of FOB Rhino as the primary objective provided clear and unprecedented guidance for intelligence personnel resulting in a decrease of wasted effort and an increase in tangible intelligence support to the MEUs. *"The 15th MEU (SOC) would seize and secure FOB Rhino while the 26th MEU (SOC) would conduct raid, interdiction, and seizure missions from the FOB."*⁷ With this decision, the TF-58 N2 became less occupied with the planning process and more involved with acquiring intelligence support for the MEU S2s and disseminating products that originated from other organizations for planning and execution of their respective missions.

Most intelligence analysis and production occurred through the efforts of the MEU S2s in Afghanistan or intelligence organizations such as the Marine Corps Intelligence Activity (MCIA), the U.S. Army's National Ground Intelligence Center (NGIC), or the Joint Intelligence Center at CENTCOM (JICCENT) working from the United States. General Mattis relied heavily on the MEU S2s for his daily intelligence support and rarely interacted with his own N2, primarily because of the geographic displacement of the two parties. Fortunately for the TF-58 N2, the intelligence sections of the two MEUs were more than capable of supporting General Mattis while he was in Afghanistan and not physically located with the TF-58 N2. General Mattis' reliance on Major Higgins and Major Koziuk, S2s for the 15th and 26th MEU (SOC)s, respectively, and their staffs for immediate intelligence support allowed the TF-58 N2 to provide the conduit between the MEUs and other intelligence organizations for their requirements. While TF-58's N2 personnel represented the TF in multiple video teleconferences (VTCs), the MEU S2s supported the Commander, Task Force 58.⁸

Without the extensive capabilities of the two MEUs, intelligence support to the commander would have been lacking. The organic intelligence personnel for the two MEUs compensated for the fact that no TF-58 N2 Marine positioned himself with General Mattis. The MEU S2s essentially acted as the TF Commander's intelligence section while also fulfilling the requirements for their respective MEUs. Although this unconventional approach of support worked, it demanded a lot from the MEU S2 sections already responsible for supporting their own commanders and other forces conducting operations with TF-58. The presence of

TF-58 intelligence personnel in Bahrain afforded an opportunity to preserve connectivity between external intelligence organizations and the MEU S2s but at the cost of separating TF-58 intelligence personnel from their commander. This type of arrangement—the separation of intelligence officers from their boss—will not work in all scenarios nor would it be acceptable to some commanders.

Technology-Facilitated Reachback

Improvements in technology and communications during the last decade have made intelligence reachback possible. Similar support to a relatively small TF during the Gulf War a decade earlier would have been unthinkable at the time and TF-58 remains more of an anomaly than the norm. However, with these advancements come additional concerns for the personnel providing intelligence support, such as the flexibility of the supporting organizations, the technological capabilities of the supported forces, and the selection of the classification levels of information. Reachback, using enhanced technology, improved the intelligence support to TF-58, but one must understand that it merely enhanced the individual efforts of the analysts working directly with the operators in Afghanistan who adeptly tailored products to fit specific missions.

The VTC has altered the manner in which forces and analysts interact. Daily VTCs between TF-58, CFMCC, and JICCENT occurred beginning on 8 November using the Joint Worldwide Intelligence Communications System (JWICS). The participants in these VTCs eventually grew to include the two MEUs (when JWICS communications to the amphibious ships were operational), MCIA, NGIC, and the Combined Forces Land Component Commander (CFLCC) G2 when tactical control (TACON) of TF-58 passed from CFMCC on 30 November. During these VTCs, TF-58 provided a daily situation report to VTC participants and shared the areas of interest that planners had identified during OPTs. These VTCs were the “primary entry point” for requirements and provided an opportunity for TF-58 to reach back and exploit the capabilities of these intelligence organizations by relying on the personnel, resources, production capacity, and specialty skills that did not exist within TF-58.⁹

Considered vital by its participants, the daily intelligence VTC became the critical node for providing intelligence reachback to the operating forces in Afghanistan. MCIA felt that the efforts of TF-58 N2 dur-

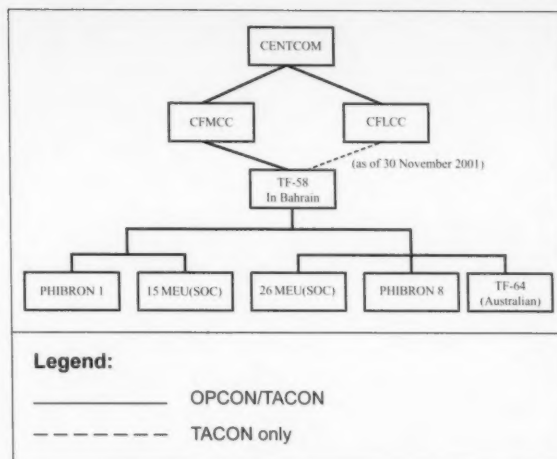


Figure 2. TF-58 Command Relationships.

ing these VTCs “were some of the most critical to the effective and efficient transmission of requirements and resultant products.”¹⁰ The minutes of these VTCs were captured and sent out via E-mail to a myriad of intelligence personnel both within and external to the TF-58 organization. This process allowed those individuals unable to attend the VTC, primarily because of a lack of JWICS VTC capability, to maintain situational awareness of TF-58 operations and requirements. Some MEU intelligence personnel in Afghanistan, unable to participate in the VTCs due to a lack of bandwidth, relied heavily on these minutes to keep informed of the situation above the TF level, while simultaneously tracking their product requests.¹¹ The communication node in Bahrain allowed information to flow two ways, increased the effectiveness of the intelligence reachback support provided to the operating forces, and provided the most time-efficient means of identifying intelligence requirements for operational planning (see Figure 2).

This separation of missions between the two MEUs allowed each of the MEU S2 staffs to conduct a thorough mission analysis and determine what intelligence support products would assist them in providing relevant information to their respective commanders. Each MEU identified information they needed to conduct their missions as well as potential future missions that could arise. The MEUs sent these requests for information (RFIs) and requests for specific intelligence products to the TF-58 N2 section in Bahrain, which then consolidated and vocalized them at the daily intelligence VTCs. Excel-

lent communication among the MEU S2s and the TF-58 N2 in Bahrain made responsive and accurate intelligence support to planning possible. Quick turnaround times from MCIA, NGIC, and JICCENT during this planning phase led to the establishment of mutual trust and admiration among all intelligence personnel involved. The technology of the VTC allowed individuals to look each other in the "virtual" eye and mutually understand the importance of the interaction. This relationship proved invaluable over the next three months and would consistently respond to multiple mission tasking, last minute changes, and "impossible" deadlines.

The Marine Corps Intelligence Activity carried a significant amount of this load and repeatedly provided results that astonished TF-58 intelligence personnel. Historically not organized to provide near-real-time (NRT) tactical intelligence production support to deployed forces, MCIA's Operational Officer, Lieutenant Colonel (LTC) Chandler, adapted his personnel resources to react to daily TF-58 requests for support and *"essentially became a 24-hour intelligence support and production center providing direct support to TF-58."*¹² One must understand, however, that other national level and Department of Defense (DOD) production requirements assigned to MCIA during this period diminished in importance, and in some cases were put entirely on hold, because of this refocus in support for TF-58's operations. The trade-off became critical to TF-58's intelligence reachback. Future reliance on organizations like MCIA for reachback will need to take into account their capability to adapt to a fluid, dynamic combat environment.

During both the planning and execution of operations in Afghanistan, LTC Chandler's team of professionals provided imagery interpretation skills, analytical assessments, and digital mapping support critical to mission accomplishment. These significant capabilities provided by MCIA overcame the inadequacies of the JICCENT, which *"was neither organized nor equipped to support the time-sensitive and expeditionary nature of TF-58's requirements."*¹³ MCIA's development of a repository website database on the Secure Internet Protocol Router Network (SIPRNET) allowed intelligence personnel in Bahrain and Afghanistan to research and pull relevant intelligence products and information for planning purposes.

Intelligence reachback allowed the Marine Corps' Service production center to coordinate, produce, and disseminate requested intelligence information used for operational planning in Afghanistan. The ability to do this effectively relied on the timeliness of the requests. *"Discipline must be maintained to not try reachback for intelligence that is required too close to the mission execution timeline."*¹⁴ It was imperative to use this technique to support planning and not current operations, although on several occasions MCIA did provide products inside the 24-hour window. The support process, when exercised inside the 48-72 hour window, pushed personnel and technology to their limit and rarely allowed the analysts forward to employ the intelligence products fully to support operations. The MEU intelligence sections quickly realized that intelligence support for the current fight could not be received from the intelligence community in a timely manner and that they would be responsible for supporting the TF-58 commander in his operational decisions.¹⁵

Intelligence support during the planning phase included information on sites in Pakistan, imagery requests, route studies in all directions from FOB Rhino, cross-country mobility studies, river crossings, HLZs, minefield and obstacle belts, line-of-sight diagrams, and nearly every other form of support imaginable. Marine forces continued to need support in these areas after they secured FOB Rhino and began conducting operations in southern Afghanistan. Intelligence reachback permitted TF-58 and the two MEUs to identify their needs and receive intelligence product support for mission planning in a timely manner.

The crucial element missing from this depiction of intelligence reachback is what the intelligence personnel within the MEU S2 staffs did with this information when they received it. Their performance during amphibious operations in Afghanistan was very impressive and illustrates the secret behind intelligence reachback.

"While the intelligence sections of both MEU (SOC)s valued the support of the MCIA, their own accomplishments and efforts cannot be understated. The Marines of these two staffs supported not only the requirements of their own organic units but also the additional requirements of a higher headquarters (TF-58) and adjacent U.S. and coalition force units. The MEU (SOC)

*S2 sections maintained the current intelligence picture and produced hundreds of specialized intelligence products in support of MEU (SOC), Special Operations Forces (SOF), and coalition force mission planning. The MEU (SOC) S2 sections possessed a significant forward deployed analytical and production capability utilizing both national technical means imagery and geospatial data. Their products were in high demand in both the joint and coalition environment in which they operated."*¹⁶

As an example, over the course of sixty-seven days, 26th MEU (SOC) downloaded approximately 1,500 images from the National Geospatial-Intelligence Agency (NGA)—formerly the National Imagery and Mapping Agency (NIMA)—Imagery Product Library (IPL), and more than two Gigahertz of mapping data via NGA's Gateway Navigator and Raster Room. They used fourteen 67-foot rolls of paper on their plotter, producing mission-specific maps and intelligence products.¹⁷ The imagery interpretation and topographic detachments *"provided the only capability in Afghanistan to produce high demand, hard copy imagery and geospatial products in a timely manner."*¹⁸ Intelligence reachback is definitely a force multiplier, but forward-deployed intelligence analysts must take advantage of this capability to exploit its potential.

Technology and improved communications gave TF-58 and the two MEUs the ability to use intelligence reachback to support combat operations in Afghanistan. Once ashore,

*"reachback was made possible by the Joint Task Force (JTF) Enabler system that provided the entire task force including Marines, other Services, and some coalition members with reliable secure telephone, VTC, chat, E-mail and file transfer to higher headquarters and other support agencies around the world."*¹⁹

Intelligence personnel from the 15th MEU (SOC) established SIPRNET connectivity with TF-58 intelligence personnel in Bahrain within six hours of securing FOB Rhino. This SIPRNET connectivity was nearly constant for the entire three-month operation. Providing a reliable medium for E-mail, chat, and intelligence product dissemination, SIPRNET communications were invaluable to supporting the TF.

Using an intelligence section of approximately 30 Marines at FOB Rhino²⁰, the 15th MEU S2 maintained the proper analytical and production capability with the operators in Afghanistan.²¹ Its ability to request intelligence support products from national organizations, such as MCIA and NGA, and subsequently tailor these products to support specific operations illustrates the proper use of reachback. The work of intelligence analysts in both MEUs drove operations on several occasions, not because they possessed intelligence support products from national agencies but rather because they had modified these products to fit their particular forces and respective missions. Technology and communications made this chore easier but reachback alone could not accomplish this task.

Top Secret communications using JWICS proved to be more difficult to establish and maintain. The *Marine Corps Enduring Freedom Combat Assessment Team Report* notes that,

*"While JWICS provided a 'backbone' for what might have been a common intelligence picture, a significant bandwidth limitation in mobile [command and control] C2 suites ashore meant, in effect, that TF-58 could not participate in higher level intelligence sharing once they were ashore. A large percentage of coordination with theater and national level intelligence organizations is done at the special compartmentalized information (SCI) level."*²²

Although predominantly accurate, this statement fails to recognize that TF-58 intelligence personnel in Bahrain did maintain this SCI connectivity with theater- and national-level intelligence organizations throughout the operation. TF-58 intelligence personnel in Bahrain, as well as the MEU intelligence personnel that remained afloat, attempted to overcome this classification obstacle by frequently sanitizing intelligence products available on JWICS down to a Secret level and redisseminating them to the MEUs through SIPRNET channels. This limitation did result *"in delays producing intelligence support products or the MEUs having to settle for text and incomplete versions of some products."*²³ However, retaining the TF-58 node in Bahrain prevented a complete absence of SCI-level intelligence because it ensured a human interface between the theater- and national-level organizations and the operating forces deployed in Afghanistan.

This human interface or liaison was essential to overcoming intelligence challenges as they occurred. The presence of Marines stationed at theater, Service, and national commands who heard the requirements of TF-58, as voiced during the many VTCs, and interpret them to their respective organizations to initiate intelligence support in one form or another proved critical to the successful accomplishment of TF-58's mission.²⁴ Reachback cannot flourish without the right individuals in the right jobs dedicated to assisting the intelligence effort supporting the operating forces. The Marines, Sailors, Soldiers, and Airmen who provided intelligence support during the three months that TF-58 operated in Afghanistan did so because they wanted to help the analysts at the "pointy end of the spear" in whatever way they could.

Conclusion

Few would argue that intelligence reachback has changed the way that operating forces receive support; however, some may argue that this support can occur using new technology and communications without the presence of intelligence analysts forward. An intelligence analyst in the United States can now provide information to deployed units through VTCs, E-mails, chatrooms, and several other media with the click of a mouse. Bypassing unaffected units, a stateside analyst can "talk" directly to a commander about his assessment of enemy intentions based on the latest information from the intelligence community. The sensor-to-shooter concept provides another possible example of an attempt to eliminate levels of command to engage enemy forces based on the NRT acquisition of information. Armed unmanned aerial vehicles (UAVs) roaming the skies of our adversaries identifying targets for destruction present an idealistic notion of how future combat will occur.

However, **ground forces planning to conduct combat operations need tailored intelligence support that only analysts intimately familiar with the capabilities of their force and in complete understanding of the commander's intent can provide.** These analysts are best prepared to provide this support because they have trained with, deployed with, and fought with their units. Their proximity to forward operations gives them a better appreciation of the ground situation while also earning them the respect and trust of their commanders. The most effective use of reachback

through technology and communications is an efficient pipeline of requests from analysts forward to organizations that create intelligence products for planning purposes; the more stream-lined this pipeline, the greater the support to operational planning.

Intelligence reachback provided significant support to TF-58's operations in Afghanistan during OEF but the presence of intelligence analysts forward proved critical to mission accomplishment. The unconventional staffing of the TF-58 N2 section required extensive use of intelligence reachback to support forces conducting combat operations in Afghanistan. Unable to provide analysis and develop intelligence products with the limited number of intelligence personnel available, the TF-58 N2 employed improvements in technology and communication to reachback for intelligence support. Other circumstances peculiar to TF-58 such as the decision not to collocate an intelligence officer with the commander and the decision to keep the MEUs' missions separate facilitated the use of reachback, but at a cost.

Future commanders and staffs must weigh these costs versus gains to determine if similar ad hoc staff arrangements would be applicable to their mission. The continued advancements of technology and communications assisted the TF-58 N2 in providing intelligence support for planning purposes. Nevertheless, it is imperative to understand that technology and communications are simply tools to expedite the request and dissemination processes. The intelligence analyst closest to the commander engaged in the fight must exploit this force multiplier by tailoring products acquired using reachback to the specific needs of the commander and his forces. This human element, this intelligence analyst-forward concept, is not new and should not change in the future. Instead, we must ensure that we continue to develop additional tools, along the lines of technology and communications, to improve reachback capabilities in the future without eliminating the need for analysts forward.



Endnotes

1. Cukor, Drew E., Major, USMC, E-mail to Lieutenant Colonel Greg Koziuk, USMC, 26 November 2002, subject: "FW: Lt. Gen. Michael Hagee Interview."
2. *San Diego Union-Tribune* Editorial Board, "Interview: Lt. Gen. Michael Hagee," 66, 24 November 2002.

3. "Forming, 27 October to 5 November 2001," unclassified documents from Marine Task Force 58's Operations in Afghanistan, February 2002, available online at <<http://www.strategypage.com/articles/tf58/>> [20 November 2002].
4. The main LOC in Afghanistan consists of Route 1, a highway that loops around the entire country's central mountain region. This route connects Kabul to Kandahar, Kandahar to Herat, Herat to Mazar e-Sharif, and Mazar e-Sharif to Kabul.
5. "Forming, 27 October to 5 November 2001."
6. "Planning, 6 November to 24 November 2001," unclassified documents from Marine Task Force 58's Operations in Afghanistan, February 2002, available online at <<http://www.strategypage.com/articles/tf58/>> [20 November 2002].
7. Ibid.
8. Some examples are the Daily TF-58 Intelligence VTCs, the Battle Damage Assessment VTCs, the Targeting VTCs, the Daily Airborne Reconnaissance Scheduling (DARS) VTCs, and other VTCs to address detainees, sensitive sites for exploitation (SSEs), etc.
9. Chandler, Mark S., Lieutenant Colonel, USMC, E-mail to author, 15 January 2003, subject: "RE: Intelligence Reachback Questionnaire."
10. Ibid.
11. Spirk, David, Jr., Staff Sergeant, USMC, E-mail to author, 15 January 2003, subject: "Re: Survey Response from Former 26MEU Senior Intel Analyst."
12. *U.S. Marine Corps: Operation Enduring Freedom; Combat Assessment Team Summary Report* (Quantico, VA: CG MCCDC, 2003), page 104.
13. Ibid.
14. Chandler.
15. Higgins, Beau, Major, USMC, E-mail to author, 17 January 2003, subject: "RE: Intelligence Reachback Questionnaire."
16. Gillan, Andrew J., Major, USMC, Intelligence Action Officer, ENDURING FREEDOM Combat Assessment Team, Memorandum for the Record, subject: "Meeting Between Major Gillan (EFCAT-SCAR), Lieutenant Colonel Koziuk (26 MEU), Lieutenant Colonel Chandler (MCIA), Major Egerer (HQ MC Intelligence Directorate)," 13 November 2002.
17. Koziuk, Greg, Lieutenant Colonel, USMC, E-mail to Major Andrew Gillan, USMC, 4 Dec 2002, subject: "MCAT Review."
18. Koziuk, Greg, Lieutenant Colonel, USMC, E-mail to author, 10 January 2003, subject: "RE: Intelligence Reachback Questionnaire."
19. *U.S. Marine Corps: Operation ENDURING FREEDOM; Combat Assessment Team Summary Report*, page 110.
20. The number of Marines at FOB Rhino was capped and limited Major Higgins to deploying 30 of his approximately 50 intelligence Marines. Among those who worked from Rhino were analysts, a collection manager, topographic specialists, imagery interpreters, human intelligence (HUMINT) specialists, ground sensor specialists, signals intelligence (SIGINT) specialists, and others.
21. Higgins.
22. *United States Marine Corps: Operation ENDURING FREEDOM; Combat Assessment Team Summary Report*, page 105.
23. Ibid.
24. Ibid., page 103.

Major (P) Christopher Fatheree, U.S. Marine Corps, is currently a Duty Officer in the White House Situation Room. A recent Naval War College graduate, he has served in a variety of military assignments. He served as Platoon Commander for a tank platoon during Operations DESERT SHIELD and DESERT STORM and as Executive Officer for a tank company. He served as the Intelligence Officer (S2) for 1st Battalion, 1st Marines, deploying to Somalia during Operation RESTORE HOPE and the western Pacific. Upon return from a MEU (SOC) deployment, he held the positions of Battalion Executive Officer for 1st Battalion, 1st Marines, and Regimental Adjutant, 1st Marine Regiment, 1st Marine Division. MAJ Fatheree served as the Intelligence Officer (S2) for Marine Air Group 31 deploying to Aviano, Italy, during Operation DECISIVE EDGE and Taszar, Hungary, during Operation NOBLE ANVIL. He next served as the Intelligence Officer, G2, for Headquarters, U.S. Marine Forces Central Command (MARCENT) in Tampa, Florida, and deployed for Operation ENDURING FREEDOM to support Task Force 58 during their operations in Afghanistan. MAJ Fatheree earned a Bachelor of Science degree in Mathematics from the U.S. Naval Academy, a Master of Science degree in Military Sciences, Intelligence, from American Military University, and a Master of Arts degree in National Security and Strategic Studies from the U.S. Naval War College. Readers may contact the author via E-mail at cfatheree@comcast.net and telephonically at (301) 805-4687.

Security Releases Required With Your Articles

The **Military Intelligence Professional Bulletin** always welcomes your professional contributions! **MIPB** does require a release signed by your local security officer or SSO stating that your article and the accompanying graphics are "unclassified, nonsensitive, and releasable in the public domain." The release should include your name, the title of the article, and contact information for us (our address is on page 80; our fax number is (520) 538-1007). If your installation or unit/agency requires you to obtain a public affairs release as well, please do so.

CSA's Focus Area 16: Actionable Intelligence

National Joint and Expeditionary Capabilities

by Lieutenant Colonel Stephen K. Inwicki

In previous issues, we discussed the focus of Intelligence Transformation as providing optimized intelligence support to the one who needs the information the most—the soldier. We are effecting this change primarily through the improved changes in our new modular units and the improved capabilities and processes the Intelligence Community brings to the fight as a vertical enabler.

This article focuses on a more detailed discussion of how the six critical Actionable Intelligence initiatives are complementary enablers of our tactical forces and nested within our Nation's joint and expeditionary capabilities.

These initiatives are:

- ☐ Tactical Overwatch.
- ☐ Information Dominance Center.
- ☐ Pantheon Project.
- ☐ Interim Distributed Common Ground System-Army.
- ☐ Project Foundry.
- ☐ Red Teaming Capability.

The six critical initiatives of Focus Area Actionable Intelligence fundamentally change the way the Army thinks about and performs intelligence collection, analysis, production, and dissemination. Our focus is to transform both our analysts and software tools from Industrial Age processes aided by technology to true Information Age processes that allow us to process, analyze, and visualize the vast amounts of information available today.

Background

We need better data tools that are capable of processing millions of data elements and presenting this information visually to the analyst, thereby allowing a human to see the relevant information contained in, for example, 200,000 messages rather than having to read and analyze each individual message. Some of these advanced tools, such as STARLIGHT data software, are in use today and are radically changing the way we do intelligence analysis.

Army **Field Manual (FM) 3-0, Operations**, identifies information as an element of combat power. As we increase our communications capabilities and develop better network-centric battle command practices, our tactical commanders are significantly increasing their appetites for more information and greater situation-

al awareness. Applying Information Age approaches changes the way we fight, but not the nature of war. The difference is that by better leveraging information and situational understanding we are able to mass effects, rather than mass combat forces. This enables us to better develop the situation out of contact, engage the enemy from standoff distances without detection, and mass effects to decisively defeat the enemy at the time and place of our choosing.

Army Intelligence must also adapt to achieve dominant knowledge, address the changing nature of the threat, and fight within the contemporary operating environment we face today. As the larger Defense Intelligence Community transforms, the Army plays a major part in developing the investment strategies, business practices, and collection capabilities that ensure protection of the needs of our soldiers. In September 2003, Secretary of Defense Donald Rumsfeld personally chose "optimize intelligence capabilities" as one of his top ten priorities.

The U.S. Intelligence Community has always tried to balance its ability to support government leadership (decision makers) and the military or the warfighter. Typically, the Intelligence Community's definition of the warfighter has equaled the Combatant Commands down to as low as the joint task force (JTF). Today, more is required. Today we need to leverage the Intelligence Community to support three groups: our government's leadership, military commanders, and our tactical units, down to individual servicemen and women engaged in operations on the land, sea, or in the air. This is a significant change, requiring an enterprise approach for the conduct of the U.S. Intelligence Community's business. It is a significant challenge, but one that is achievable.

Army Intelligence transformation is leveraging joint, national, and interagency capabilities to align with the three components of our Army's transformation strategy: the transformation of Army culture, the transformation of processes, and the development of inherently joint transformational capabilities. Given our knowledge of the threat and the lessons learned since 11 September 2001, our transformation process is enabling our Army with new combinations of processes, concepts, capabilities, people, and organizations necessary

to conduct full-spectrum operations and achieve dominant knowledge of the battlespace.

Traditional intelligence methods and products served the U.S. forces well during the major combat operations phase of Operation IRAQI FREEDOM (OIF). However, we fell short of achieving the desired level of situational awareness for our forces on the attack because of the lack of adequate on-the-move communications and the inability to rapidly fuse all-source intelligence from disparate data sources.

During the stability operations phase of OIF, intelligence collection requirements shifted dramatically from identifying Iraqi military forces, to identifying insurgent groups and their respective intentions. This significantly increased human intelligence (HUMINT) capability requirements as well as select technical collection capabilities. What really changed was a much greater reliance on dominant knowledge to attack the threat surgically in an urban environment, vice using overwhelming firepower against a conventional threat on a relatively open battlefield.

Focus Area Actionable Intelligence is addressing these concerns through the development of six critical initiatives. The focus area originally developed 22 new initiatives as part of its mission analysis. As a result of further review, these six were deemed direct and interdependent enablers to the modular changes of our new Unit of Action (UA) force structure.

Critical Initiative: Tactical Overwatch

The concept of "tactical overwatch" is not new, but was previously constrained by an inadequate technological framework to facilitate rapid sharing, fusion, and visualization within tactically useful timelines. Tactical overwatch mitigates the current risk to our forces on the move and leverages all available data within the Intelligence Community to support our tactical units.

An example of the problem overwatch addresses would be the situation a brigade S2 in the 3d Infantry Division (3ID) faced while advancing on Baghdad. The brigade had been advancing for a period of time before it hit a sand storm and came to a tactical halt. The brigade S2 established his limited tactical communications and proceeded to start downloading his message traffic. He had more than 900 E-mail messages exceeding one Megabit apiece. Even if he had the bandwidth to download this traffic, he did not have sufficient personnel or processing power to make sense of it. What he needed was one message to update his common operational picture (COP) and a

place to send his commander's request for information (RFI) that would quickly provide an answer.

The honest fact is that today the brigade's RFI would compete with other requirements at the division analysis and control element (ACE). Despite our best efforts, often brigade RFIs would fall to a lower priority than the division commander's requirements. We can do better, and one way to resolve this issue is the creation of dedicated tactical overwatch teams at the theater ACE. Embedded within the theater ACE, these teams' sole mission is to provide a tactical overwatch capability dedicated to units in the field down to brigade level. We are building four tactical overwatch teams into the MI force structure of each theater intelligence brigade. The UEx G2 (division of today) will be allocated a percentage of overwatch teams, similar to the way we allocate priority of fires, and the G2 will decide how to apportion the overwatch support.

Formalizing "tactical overwatch" as a discrete, downward-focused mission task is necessary to harness the power of forward area and national collection, analysis, and synthesis of information from shared databases, advanced processing, and distributed visualization. Tactical overwatch will provide responsive support to designated tactical forces during lesser situational awareness-high vulnerability periods—e.g., tailored, fused assessments, targets, cueing, and warning at classification levels they can use instead of megabytes of information. Overwatch teams will also be capable of rapidly merging the essence of restricted Intelligence Community reporting from sensitive compartmented information (SCI), collateral (Secret), and Sensitive but Unclassified (SBU) domains into succinct answers for our tactical forces. Tactical Overwatch is already in a proof-of-concept phase providing support to 3ID during its preparation, deployment, and employment in OIF 3.

Critical Initiative: Information Dominance Center

The U.S. Army Intelligence and Security Command (INSCOM) Information Dominance Center (IDC) is a state-of-the-art operational intelligence organization. The IDC has pioneered processes and methodologies for rapid fusion and analysis of complex threat networks and activities. It uses "cutting edge" software tools developed by nationally ranked software developers sitting side-by-side with analysts against all-source, all-classification databases comprised of data-tagged signals intelligence (SIGINT), HUMINT,

imagery intelligence (IMINT), counterintelligence (CI), sensor measurement and signatures intelligence (MASINT), and tactical and open-source reporting.

IDC extensions are established in each of the INSCOM theater intelligence brigades and JTF headquarters in both Iraq and Afghanistan. IDC fusion analysis leverages national, theater, and tactical reporting to rapidly establish threat association and linkages; recognize threshold events, activity patterns, and anomalies; and understand the significance of information "buried" within an ever-increasing volume of collected material. The IDC extensions can quickly visualize the resulting answers and analysis and share them with IDC extension nodes and, through existing networks, down to tactical consumers. The fielding of a software bridging capability between the IDC and the interim Distributed Common Ground System-Army (DCGS-A) during the 4th quarter of fiscal year 2004 (FY04) will facilitate near-real-time sharing and visualization across the Top Secret SCI and Secret collateral domains. The IDC is an intelligence force multiplier for deployed Army and Joint forces. The IDC will also execute the tactical overwatch proof of concept with 3ID during OIF 3.

Critical Initiative: The Pantheon Project

Today, any new technology that has intelligence applications requires prompt incorporation into the intelligence system. To that end, we are implementing a rapid fielding capability through the creation of the Pantheon Project. The project has brought together a team of 10-12 elite, world-class individuals from business, academia, and government to address and solve the hardest technical problems, creating technological or procedural solutions for the enhancement of tactical through national intelligence echelons. These solutions will then be rapidly spiraled forward into the Intelligence Community and tactical units.

This program will integrate emerging capabilities into a software integration lab within the IDC, a collaborative effort between the Pantheon Project, the IDC, and the DCGS-A program. The software integration lab will then operationalize these emerging capabilities and integrate them into the next version of DCGS-A software fielded to the force. The Pantheon Project provides us the benefits of world-class expertise within a constrained government budget.

Critical Initiative: Begin Fielding an Interim DCGS-A Capability This Year

DCGS-A is the centerpiece of the future Army intelligence framework and is the enabler for all intelligence operations at all echelons from the brigade to national level. DCGS-A is also part of a joint Distributed Common Ground/Surface System (DCGS) family of systems under simultaneous development by all the Services. For the Army, DCGS-A is already a Future Force Program of Record (POR) designed to field a capability in FY08. DCGS-A replaces all of our intelligence processing systems such as the All-Source Analysis System (ASAS), Tactical Exploitation of National Capabilities (TENCAP) systems, CI/HUMINT Information Management System (CHIMS) and CI/HUMINT Automation Tool Set (CHATS), and the Integrated Processing Facilities (IPFs) for Guard-rail Common Sensor. We have already begun accelerating DCGS-A to the field in a spiral development approach and have already fielded interim DCGS-A fixed-site capabilities to the theater intelligence brigades and groups. We are expanding this effort and will provide the Army with increasing capabilities that correspond to improvements in automated fusion and information visualization technologies down to the maneuver battalion level. We are currently testing and fielding an interim DCGS-A capability to 3ID, which will redeploy to Iraq with this new capability.

The objective DCGS-A will fuse and integrate data from all collectors and sources. This includes national-level, non-intelligence Army sensors, and other Service platforms. Additionally, DCGS-A will receive, retrieve, and exploit information available in the Joint, interagency, and multinational arenas. This will enable the Army to leverage the essence of the vast amounts of data available at various classification levels and provide our soldiers a COP and a running intelligence estimate. The COP will provide situational awareness and the running estimate will add predictive analysis to enable our soldiers and commanders to move from situational awareness to situational understanding.

Critical Initiative: Project Foundry

Project Foundry complements Army efforts to infuse greater intelligence capacity in UEx and UA elements by providing a vehicle to integrate a percentage of tactical intelligence soldiers into ongoing live-environment intelligence operations and expose them to complex theater environments. It will involve a significantly larger percentage of "tactical" intelligence soldiers in

"real world" intelligence operations of theater and national relevance (SIGINT, HUMINT, CI, and analysis). Assignment of Foundry soldiers is to combat UEx/UA maneuver units (they wear that "patch"), but their stationing is with their families at geographically dispersed UEy (INSCOM) intelligence brigades for the same period of stabilization as their assigned tactical unit, then they receive reassignments based on Army needs.

Project Foundry has three primary goals:

- ❑ Provide our soldiers with better technical training for their military occupational specialty (MOS) skills.
- ❑ Expose our soldiers to the cultural issues associated with the region in which they are likely to operate.
- ❑ Enable our soldiers to contribute to the overall intelligence effort of our nation.

During the Foundry stationing period, UEy intelligence brigades will exercise operational control of Foundry soldiers, employing them on live-environment intelligence missions, but returning them to their parent UEx/UA units for scheduled major training events and pending contingency deployments. Foundry will infuse more highly trained and experienced teams into "early deployer" combat units. Foundry soldiers will also receive cultural, religious, ethnic, and environmental experience that continental United States (CONUS) bases cannot effectively replicate. This concept is similar to the Navy "Ship Rider" program where they station intelligence sailors with national intelligence units and agencies to hone their technical skills in preparation for deployment with the fleet.

Critical Initiative: Red Teaming Capability

We need to integrate an ability to see ourselves as the enemy sees us better during routine planning and operations. The standard intelligence preparation of the battlefield (IPB) process does not sufficiently address asymmetric threats. To meet this challenge, the U.S. Army Training and Doctrine Command (TRADOC) is establishing a "Red Team University" (RTU) under the Combined Arms Center at Fort Leavenworth, Kansas. They will model the RTU after the School of Advanced Military Studies (SAMS) in that it will be an advanced curriculum open to all branches of the Army. The first pilot course will be during the 2004-2005 academic year. RTU graduates will serve as staff advisors to our units and to regional Red Teams at the theater level.

The Army will assign Red Team-trained personnel to unit staffs; they will actively participate during the planning process to ensure proper consideration of both conventional and asymmetric threats. Other Red Team personnel will be available to conduct final re-

views of operational plans and for special projects addressing areas of concern to our commanders.

To achieve this capability, we need to establish and ramp-up an initial core Red team capability for each regional theater of operations. We have stood up an initial core team to meet immediate Army needs and lay the foundation for expansion of this capability to each regional theater. This core group will comprise full-time threat and functional experts (information operations [IO], Special Operations Forces [SOF], logistics, etc.) who will develop a broader network of regional, cultural, and subject-matter experts from across the Army and the Intelligence Community. These experts will holistically assess proposed Blue Force operations from an adversary's perspective, identify weaknesses, wargame mitigating solutions, and determine second and third order effects.

The Future of Military Intelligence

Transforming to Information Age processes will allow us to leverage the essence of the vast amounts of information available today. This will radically change the way we do business and dramatically improve the commander's and soldier's understanding of the battlespace. The soldier, whether intelligence analyst or operator, will interface directly, and in near-real time, with the information required for current operations. We have begun to ingrain the concept that "Every Soldier is a Sensor" within the Army. Tactical commanders nearest to the fight will leverage modular, tailored packages to develop intelligence, while receiving support from a network of analytic centers providing overwatch.

The success of Actionable Intelligence will be judged by the ability of our soldiers to operate more efficiently, with greater situational awareness, prevailing in an environment very different from that of our recent past. They will accomplish their missions and return home safely using our asymmetric advantages of advanced technology, precision firepower, and a pervasive presence to destroy the terrorist networks threatening us today. Actionable Intelligence will be the key to those advantages. Our Army and our Nation demand no less.



Lieutenant Colonel Steve Iwicki is currently assigned to the Army G2 and serving as the Deputy Director of Task Force Actionable Intelligence (TF-AI). Readers may contact him via E-mail at steve.iwicki@hqda.army.mil and telephonically at (703) 693-6210.

Doctrine Corner

USAIC&FH Fields New and Updated Intelligence Manuals

by Michael A. Brake

The U.S. Army Intelligence Center and Fort Huachuca (USAIC&FH) Doctrine Division anticipated the most important doctrinal products to meet the field's requirements for the on-going Global War on Terrorism. The development of this updated doctrine continues, driven primarily by requirements expressed by the field units involved in Operations IRAQI FREEDOM and ENDURING FREEDOM (OIF and OEF, respectively). These doctrinal efforts, while incorporating current lessons learned, are essentially founded on time-tested principles and fundamentals. What the Doctrine Division has done is to refine and update the terminology and considerations for the complexities of the modern environments.

USAIC&FH is in the final stages of production of several new doctrinal products. The Doctrine Division is producing several of these products as Special Texts (STs) primarily designed for intelligence staffs and soldiers conducting intelligence support to operations. Commanders and staffs at all echelons can use them and they apply equally to the Active and Reserve Components, to include the U.S. Army Reserve (USAR) and the U.S. Army National Guard (ARNG). STs decrease the time required to develop and disseminate doctrine and tactics, techniques, and procedures (TTPs) to the field for specific and unique operational considerations. The products discussed in this article are:

- ☐ **ST 2-91.4, Intelligence Support to Operations in the Urban Environment, August 2004.**
- ☐ **ST 2-91.1, Intelligence Support to Stability Operations and Support Operations, September, 2004.**
- ☐ **FM 2-01.3, Intelligence Preparation of the Battlefield [IPB], Draft October 2004.**
- ☐ **ST 2-01.301, Specific TTP and Applications of IPB, In review.**
- ☐ **FMI 3-07.22, Counterinsurgency Manual, October 2004.**
- ☐ **Intelligence Toolkit.**

ST 2-91.4, Intelligence Support to Operations in the Urban Environment, establishes an initial doc-

trinal foundation for conducting intelligence support to operations in the urban environment. This product was specifically written to incorporate the operational doctrine and terminology from **FM 3-06, Urban Operations**, and **FM 3-06.11, Combined Arms Operations in Urban Terrain**.

This ST focuses on the intelligence aspects and considerations of urban operations. The ST gives intelligence professionals a basic framework within which they can provide commanders effective intelligence support in the urban environment. It contains—

- ☐ A wide variety of examples of intelligence requirements based on the numerous factors that require consideration when conducting operations in urban terrain.
- ☐ A listing of different information sources available in the urban environment.
- ☐ Discussions of how the intelligence disciplines can support operations in the urban environment as well as some examples of types of urban intelligence tools and products.

ST 2-91.1, Intelligence Support to Stability Operations and Support Operations, will supersede FM 34-7, *Intelligence and Electronic Warfare Support to Low-Intensity Conflict*, published in May 1993. USAIC&FH specifically wrote it to incorporate the operational doctrine and terminology from FM 3-07, *Stability Operations and Support Operations*, published in February 2003.

ST 2-91.1 provides intelligence operations doctrine and TTPs for the roles, responsibilities, and activities of intelligence support in stability operations and support operations. This manual addresses operations from the brigade through corps levels, focusing on G2/S2 roles and requirements and incorporates the doctrinal content of—

- ☐ **FM 2-0 (formerly FM 34-1), Intelligence.**
- ☐ **FM 34-2, Collection Management and Synchronization.**

- ☐ **FM 34-3, Intelligence Analysis.**
- ☐ **FM 3-05.102 (formerly FM 34-36), Army Special Operations Forces Intelligence.**
- ☐ **FM 2-01.2 (formerly FM 34-60), Counterintelligence.**
- ☐ **FM 2-01.3 (formerly FM 34-130), Intelligence Preparation of the Battlefield.**

It is consistent with Army doctrine for stability operations and support operations in **FM 3-0 (formerly FM 100-5), Operations**, and **FM 3-16 (formerly FM 100-8), The Army in Multinational Operations**. ST 2-91.1 contains multiple scenarios and examples of collection tools based on generic models of lessons learned as well as important relevant appendices that address utilization of linguist support and the laws of war.

FM 2-01.3, Intelligence Preparation of the Battlefield, will supercede FM 34-130. This manual incorporates the operational doctrine and terminology of—

- ☐ **FM 2-0, Intelligence.**
- ☐ **FM 5-0, Army Planning and Orders Production**
- ☐ **FM 6-0, Mission Command: Command and Control of Army Forces.**
- ☐ **FM 7-15, The Army Universal Task List.**

FM 2-01.3 is a smaller manual that focuses specifically on the fundamental basis of IPB and the four-step IPB **process**. Recent comments from the field indicate that the current IPB process is entirely adequate for supporting ongoing and future missions; concerns have been raised, however, about references to help Military Intelligence (MI) personnel focus the IPB process based on the type of mission the units are conducting.

ST 2-01.301, Specific TTP and Applications of IPB will be a companion ST to FM 2-01.3. The ST provides examples of specific IPB TTPs for a range of specific missions. At this time, the ST contains specific TTPs for—

- ☐ **Offense.**
- ☐ **Defense.**
- ☐ **Stability operations.**
- ☐ **Support operations.**
- ☐ **Information operations.**
- ☐ **Urban operations.**

- ☐ **Space-based operations.**
- ☐ **Theater missile defense.**
- ☐ **Electronic preparation of the battlefield.**

Updated Counterinsurgency Manual

The U.S. Army Combined Arms Command Doctrine Division (CADD) at Fort Leavenworth, Kansas is in the process of quickly publishing an updated Counterinsurgency (COIN) manual. This manual will initially be an interim field manual (FM-I) designed as a reference for commanders and leaders, **FM-I 3-07.22**. USAIC&FH has contributed a chapter on intelligence support to COIN operations as well as appendices with some examples of intelligence requirements, relevant analytical tools, and sample indicators focused on the center of gravity in any COIN operation: the population.

Intelligence Doctrine Toolkit

USAIC&FH is also currently developing an Intelligence Doctrine Toolkit that will require For Official Use Only handling. It consists of both MI and MI-related doctrine to include—

- ☐ **Approved MI and combined arms doctrine.**
- ☐ **Approved joint publications.**
- ☐ **Draft MI and combined arms doctrine (including the manuals discussed in this article).**
- ☐ **Related documents such as the *S2X Handbook* and the *Tactical HUMINT Team Leader's Handbook*.**
- ☐ **Lessons learned documents.**

USAIC&FH will distribute this Intelligence Doctrine Toolkit on CD to all active duty, ARNG, and USAR intelligence sections from battalion-level up. If your unit does not receive a copy of the Intelligence Toolkit or you wish to make sure that USAIC&FH has current contact and mailing information for your unit, you can contact the Doctrine Division at ATZS-FDC-D@hua.army.mil.



*Michael Brake is currently writing **ST 2-19.402, BCT Intelligence Operations**, at the USAIC&FH Doctrine Division. Readers may contact him via E-mail at michael.brake@us.army.mil and by telephone at (520) 533-9972 or DSN 821-9972.*

Proponent Notes

New Translator Aide MOS, Warrant Officer Insignia Changes, and Other Updates

by Lieutenant Colonel Harvey Crockett

It has been a very busy first year learning the job of Director of the Office of the Chief, Military Intelligence (OCMI). Thanks to all of you for your support, concern for our soldiers, and patience over the past year. The next year will be a blast with much to do. As you read below, you will see that there is much going on in the proponent. We will do all we can to keep you informed through this venue and others. Good luck as we work together over the next year to do all we can to take care of our MI soldiers.

Enlisted Professional Development Opportunities

Translator Aide, Military Occupational Specialty (MOS) 09L. Current operations have highlighted the need to have soldiers with the right language and the right training, in the right place at the right time. This lesson not only applies to Military Intelligence (MI), but across the Army.

*Editor's note: With this issue, the **Military Intelligence Professional Bulletin** introduces a new department, **Language Action**. In the first in this series of columns, Peter Shaver also discusses the 09L Translator Aide MOS in "Military Translators and Interpreters."*

The Translator Aide (MOS 09L) was recently created for the Individual Ready Reserve (IRR). During wartime and national emergencies, 09Ls will mobilize initially for 24 months and will deploy to the theater for 12 months (boots on ground). While not an Intelligence MOS in the traditional sense, 09L does provide the Army with a soldier able to speak a foreign language and to assist commanders in any number of missions where communicating with the local population is an issue. They will most often receive assignments to tactical units (maneuver brigade, military police (MP) company, the public affairs office staff, etc.) before deployment and will serve with that unit or section throughout the deployment.

The Army's intent is to recruit non-prior-service soldiers who do not necessarily possess U.S. citizenship or security clearances. For those accessed into the 09L program who do not achieve a score of 80 on the English comprehension language test (ECLT), English as a second language (ESL) training is mandatory. The recruits will attend the ESL course at the Defense Language Institute English Language Center (DLIELC), at Lackland Air Force Base, Texas, before reporting to Basic Combat Training (BCT) at Fort Jackson, South Carolina, if required.

Advanced Individual Training is a six-week course located at Fort Jackson. The primary curriculum consists of one week of Modern Standard Arabic or another target language, dialect training for two weeks, followed by three weeks of translation and interpretation training including a three-day field training exercise (FTX).

The Army has authorized an enlistment bonus for this MOS. Additionally, those 09Ls who are activated are authorized Foreign Language Proficiency Pay (FLPP). Soldiers recruited into 09L will be given an opportunity to "fast track" their U.S. citizenship; they would complete the necessary paperwork and required interviews before their mobilization for service in Operations IRAQI FREEDOM (OIF) and ENDURING FREEDOM (OEF). Finally, soldiers enlisting in this MOS will be rewarded for their linguistic skills by enlisting under the Army Civilian-Acquired Skills Program (ACASP) and enter the Army as a Private First Class.

Translators will provide some reading and writing support, but their primary mission will be assistance in speaking with the local population. They will not normally provide simultaneous translation or serve as official translators. Nevertheless, they should prove to be a valuable asset for the maneuver commander. Other 09L duties may include:

- ☐ Document translation.
- ☐ Assistance in technical exploitation of equipment through the translation of data plates, manuals, and other items written or engraved on equipment.
- ☐ Assessment of the cultural environment, and provision of survival language skill training and culture familiarization to the supported unit.
- ☐ Assistance to MPs during security or traffic control missions.

Upcoming Enlisted Boards. The next Enlisted Promotion Boards are for Master Sergeant and Sergeant First Class and they will be held in September and November 2004, respectively. You can find updated and promotion zone information posted at <https://www.perscom.army.mil/select/EnlBdSched.htm>.

Warrant Officer Professional Development Opportunities

Changes in Warrant Officer Insignia. On 9 July 2004, two significant and historic changes in collar insignia for U.S. Army Warrant Officers will occur. These affect senior warrants' rank insignia and branch affiliation collar insignia.

First, CW5s will no longer wear the Master Warrant Officer (MW4) rank insignia currently worn. The Chief of Staff of the Army (CSA) approved the MW4 insignia in 1988 to designate certain Chief Warrant Officers W4 as master warrants. Passage of the *Warrant Officer Management Act* in 1991 established the grade of CW5. At that time, the Army Chief of Staff approved continued use of the Master Warrant Officer insignia for Chief Warrant Officer W5. On 9 July 2004, CW5s will wear the CW5 rank insignia approved by the CSA in 1970. The Army no longer has Master Warrant Officers and the CW5 insignia of grade will make it easier to identify the warrant officers who have reached the pinnacle of their profession.

Second, U.S. Army warrant officers will no longer wear the warrant officer collar insignia—an eagle rising with wings displayed standing on a bundle of two arrows. Warrant officers wore the eagle-rising collar insignia in lieu of a branch insignia. Again, beginning on 9 July 2004, all warrant officers will wear the insignia of their respective branches upon completion of their specific branch qualification. However, the tradition of wearing the

eagle-rising insignia will continue. Students attending the Warrant Officer Candidate School and the specific Warrant Officer Basic Courses will continue to wear it.

These changes are 2 of 45 recommendations approved for implementation by the CSA-directed Army Training and Leadership Development Panel in August 2002. Implementation of these two recommendations is specifically intended to make the officer branch the advocate for their warrant officers, for their training and utilization.

Upcoming WO Boards. The last promotion board adjourned in May and release of the board results should be around September. The only other boards scheduled right now are the last two accessions boards slated for this year. The first will be held in July and another in September. Both are important to us since we are running behind in our selection numbers needed to maintain a healthy warrant officer MI corps.

Officer Professional Development

MI Branch Qualification Updates. OCMI has submitted all updates to the revised **DA PAM 600-3, Commissioned Officer Development and Career Management**, and they are undergoing staffing at the Headquarters, Department of the Army level. The main change to the MI chapter is in the area of branch qualification. Company command, of course, remains the main step in branch qualification for Captains (CPTs). However, in addition to company command, all CPTs must now expect to serve at least another 12 months in an MI-coded position. MI majors (MAJs) must serve at least 12 months as a battalion executive officer or S3, as a division or corps analysis and control element (ACE) chief, or as a Stryker brigade combat team (SBCT) S2. They must also serve at least another 18 months as a brigade S2 or in any other intelligence officer position at any echelon. Lieutenant colonels (LTCs) may serve at least 24 months in any MI LTC position. MI colonels (COLs) must serve at least 24 months in any MI COL position.

Expect additional updates as the Army moves forward with transformation, modularity, and force stabilization initiatives.

Change to Captain Selection Boards. From 1997 through 2003, the Army G1 approved "fully

qualified" selection boards for promotion to CPT as a temporary measure to increase the number of captains available to fill authorized positions. Under the "fully qualified" standard of selection, there were no numerical constraints on the number of officers recommended as long as they met branch qualification standards. With CPT strength currently hovering around 102 percent, the Army has returned to the "best qualified" standard for promotion to CPT.

The Army's promotion goal for officers' first consideration is 90 percent. The first-time-considered promotion rate for MI officers in the fiscal year 2004 CPT selection board was 92.5 percent. This is a selection rate slightly above the Army average and, while lower than the previous seven years, continues to demonstrate that MI officers remain competitive with the rest of the Army.

Upcoming Officer Selection Boards. The last Command and General Staff College selection board, before going to universal slating, will convene on 24 August 2004.

OCMI Points of Contact

The point of contact (POC) for enlisted professional development is Sergeant Major Maurice

Mitchell. Readers may contact him via E-mail at maurice.mitchell@hua.army.mil.

The POC for warrant officer professional development is Chief Warrant Officer Five (CW5) James Prewitt-Diaz. You can contact him via E-mail at james.prewitt-diaz@hua.army.mil.

The POC for officer professional development is Ms. Charlotte Borghardt. You may contact her via E-mail at charlotte.borghardt@hua.army.mil.

OCMI Website

Interested readers can reach the OCMI website by on the Intelligence Center Online home page at <http://usaic.hua.army.mil/OCMI>. You will be able to find information on issues ranging from enlisted career field overviews to officer, warrant officer, and civilian updates.



Lieutenant Colonel Harvey L. Crockett is the Director, Office of the Chief, Military Intelligence (MI). Readers may contact him via E-mail at harvey.crockett@hua.army.mil. Robert C. White, Jr., is the Deputy OCMI; you can reach him via E-mail at bob.whitejr@us.army.mil.

Attention NCOs

Send us your articles and book reviews. If you have any experiences you can share on MI doctrine, professional development, or "how-to" tips, please send them to **MIPB**. Email them to mipb@us.army.mil or call (520) 538-0956 or DSN 879-0956.

Address Verification?

Due to new postal regulations, we are updating our mailing list for **MIPB**. The Post Office now requires building numbers, street addresses, and nine-digit zip codes. APO addresses should include the unit, box number, and CMR number as appropriate. Other overseas or non-U.S. addresses should be complete, including postal and country codes and names. Please review and update your mailing label. If your address is not correct or is incomplete, please notify us by E-mail at mipb@hua.army.mil with subject heading "Address Update." Please include both your incorrect (copy it exactly from the label) and correct addresses. You can also contact us by telephone at commercial (520) 538-1009 or DSN 879-1009, or by mail at the address on page 80.

111th MI Brigade Training Notes

by the Office of the Dean of Training, 111th MI Brigade

The 111th Military Intelligence (MI) Brigade has experienced considerable change over the past several months. Recently, much of the Brigade's senior leadership changed:

- ❑ Colonel Thomas Kelley replaced COL Michael Flynn as Brigade Commander.
- ❑ Lieutenant Colonel Brian Clark replaced LTC Brian Lesieur—now serving as the Deputy Commander of the 111th MI Brigade—as Commander, 304th MI Battalion.
- ❑ LTC Kenneth Diller replaced LTC Mark Costello as the Commander, 306th MI Battalion.
- ❑ LTC Thomas Miller replaced LTC Dennis Perkins as the Commander, 309th MI Battalion.
- ❑ LTC Kevin Degnan replaced LTC Sharon Hamilton as the Commander, 344th MI Battalion.

Given recent dramatic increases in the size and tempo of the U.S. Army Intelligence Center and Fort Huachuca's (USAIC&FH's) training mission, these new commanders as well as all the other soldiers and civilians within the Brigade have found it necessary to hit the ground running. The Global War on Terrorism (GWOT) has resulted in significant growth in the number of students trained in the various MI military occupational specialties (MOSs) by the 111th MI Brigade. Moreover, current plans for restructuring the Army call for even greater growth in the future.

Whereas most intelligence specialties are growing, some are experiencing massive increases. In fiscal year 2005 (FY05) for example, the 309th MI Battalion will train at least 500 more initial entry training (IET) soldiers as human intelligence (HUMINT) collectors (MOS 97E), 750 more counterintelligence (CI) agents (MOS 97B), and 1,200 more intelligence analysts (MOS 96B) than initially scheduled through the Army Structure Manning Decision Review (SMDR) process. Furthermore, student numbers for unmanned aerial vehicle (UAV) operators (MOS 96U), and all associated specialties trained by the 305th MI Battalion are also significantly higher. In FY05, for example,

the 305th is currently set to train more than 200 more UAV operators than initially programmed.

Increases of this magnitude demand flexible, adaptive, and innovative training strategies in order to train the student load to the highest standards of professional competencies. In keeping with USAIC&FH's historical commitment to quality, applied, state-of-the-art training, COL Kelley has succinctly stated that IET is the 111th MI Brigade's highest priority mission. With this prioritization guidance, leaders and training personnel throughout the Brigade are re-examining their commitments of resources, facilities, instructors, and equipment to the various courses.

In addition to setting training and resource priorities that are consistent with the Commander's guidance, the 305th, 306th, 309th, and 344th MI Battalions have responded to the challenges associated with enormous increases in student numbers through various means. These means include modifications of training times and procedures, and modifications of classroom usage patterns. The Battalions have also taken the lead in the coordination of building new classrooms, offices, and other facilities with heavy reliance on temporary modular structures. Furthermore, they have found it necessary to work the unfunded requirements process diligently in order to bring all the digital training equipment needed online in time to train the expanded student load.

Attendant to the challenges associated with increasing demands for well-trained intelligence professionals has been the need to modify courses quickly to include lessons learned in Iraq, Afghanistan, and elsewhere. In cooperation with the leadership and training developers in the Futures Development Integration Center (FDIC) Division of Training Development and Support (TD&S), instructors have expedited the modification of existing courses to include relevant recent input from the field. Examples of such changes include the infusion of cultural awareness and contemporary operating environment (COE) training into the curriculum. In some cases, in keeping with the urgency of the GWOT, we may process the formal paperwork, such as modifications to

programs of instruction (POIs), after integration of the new materials into lesson plans.

As Operations IRAQI FREEDOM and ENDURING FREEDOM (OIF and OEF, respectively) have intensified, U.S. Army Reserve (USAR) and U.S. Army National Guard (ARNG) training has become an increasingly important mission for USAIC&FH. Accordingly, the 2/84th MI Battalion activated in January 2004 to train HUMINT collectors and CI agents (MOSs 97E/B) and intelligence analysts (MOS 96B). Since activation, the 2/84th has graduated 82 97B MOS, 53 97E MOS, and 36 96B MOS students. They also sent a mobile training team (MTT) to Europe where they successfully trained 375 students in tactical questioning. Currently, the 2/84th has another 70 students enrolled in classes, and the Battalion has been extended on active duty until January 2006. During that time, they expect to train at least 500 more MI soldiers.

Officer training has been involved in a major transformation effort for several years. The need to focus on the training requirements associated with the GWOT served to slow this process. Nonetheless, the 304th MI Battalion (charged with officer training) continues to work on this endeavor as well as accommodate the increasing need for well-prepared initial entry intelligence officers. Moreover, the 304th is training officers from several other nations. The 304th has been especially active in the development of applied training materials such as realistic applied scenarios and has quickly incorporated lessons learned.

The Joint Intelligence Combat Training Center (JICTC), under the leadership of the 304th MI Battalion, provides an excellent example of the 111th MI Brigade's commitment to flexible, adaptive training designed to meet the rapidly changing needs of the GWOT while maintaining the highest traditions and standards of the Military Intelligence Corps. In the asymmetric world of modern international conflict, operations are increasingly joint in nature. The JICTC affords students from all branches of the U.S. military, allied nations, and other intelligence agencies, an opportunity to apply the skills and knowledge they have learned in the classroom through participation in real-world scenario-based exercises.

The 344th MI Battalion, located at Goodfellow Air Force Base, Texas, is also very busy. During this fiscal year, they will train approximately 513 crypto-

logic linguists (MOS 98G), 368 signals intelligence analysts (MOS 98C), and 84 signals collection/identification analysts (MOS 98K). In the next fiscal year, the total training load will likely increase by more than 100 students. Furthermore, the entire 98 Career Management Field is currently undergoing significant organizational changes.

In addition to the immense growth in instructional requirements for MOS training at USAIC&FH, the 111th MI Brigade has also been called upon to teach a large number of specialized functional courses. These include courses that focus on:

- ☐ Theater-oriented support for combating terrorism.
- ☐ Strategic debriefing.
- ☐ Cultural awareness.
- ☐ Contemporary operating environment (COE).
- ☐ Tactical questioning.
- ☐ Other special missions and systems training.

The Brigade Functional Course Division in cooperation with the 306th MI Battalion manages most of these courses. Whereas, much of the instruction takes place at Fort Huachuca, Arizona, the 306th has conducted numerous training activities at remote sites using MTTs. In July and August 2004, the 306th MI Battalion's MTTs trained more than 767 soldiers. In some cases, teams from the 111th MI Brigade deployed to Iraq to provide on-the-spot training.

Currently, all soldiers, civilians, and contractors working within the 111th MI Brigade and the greater Fort Huachuca community, are racing against time to be ready to effectively train, house, and accommodate the massive increase in student numbers expected over the next several years and even into the next decade. The sense of urgency is realistic, the mission is critical, and the only acceptable outcome is total success in the Global War on Terrorism.



Readers may contact the 111th MI Brigade Dean, George A. VanOtten, Ph.D., via E-mail at george.vanotten@us.army.mil. The Associate Deans are Richard B. Loomis (richard.b.loomis@us.army.mil), Francis W. Smith (francis.smith@us.army.mil), and Ken L. Welsh (ken.welsh@us.army.mil).

Language Action

Military Translators and Interpreters

by Peter A. Shaver

The information in this article will briefly provide the background, present status, and foreseeable future of the Individual Ready Reserve (IRR) military occupational specialty (MOS) 09L (Translator Aide). The U.S. Army Intelligence Center and Fort Huachuca (USAIC&FH), and specifically the Office of the Chief, Military Intelligence (OCMI), is the current proponent for 09L with the responsibility of developing the career path, regulatory guidance, and training development through the Training Development and Support Directorate (TD&S), of the Futures Development Integration Center (FDIC). The Concepts and Doctrine Divisions will be responsible for concept and doctrine development and other related matters for 09L.

Due to the current operational environment and the critical requirement for Arabic and other Middle Eastern language translators and interpreters, on 10 April 2003, the Principal Undersecretary of Defense for Personnel and Readiness Charles S. Abell approved the Army G1 concept to establish MOS 09L. Following Mr. Abell's approval, the Army G1 assigned USAIC&FH as branch proponent for 09L.

Although MOS 97L (Translator/Interpreter) already existed, it did not meet the force structure requirements of a tactical-level translator/interpreter. In addition, as a Reserve-only MOS, the U.S. Army National Guard (ARNG) and U.S. Army Reserve (USAR) were eliminating MOS 97L due to unrealistic personnel and career-path development requirements.

Formally established as an IRR pool of Arabic, Dari, Pashto, and other linguists (to include Arabic dialects) to support the Active Component (AC) during peacetime and war, MOS 09L may expand to include other critical languages in the future as determined by the Army Foreign Language Proponency Office (AFLPO) at the Department of Army G2. As it is currently a pilot program, its future will be determined through validated analysis, which the Defense Language Institute (DLI) is conducting through interviews, surveys, and feedback from 09Ls and their commanders and supervisors.

The current objective is to recruit 250 09Ls per year until 700 are in the force, and then attempt to maintain that

number. As Branch Proponent, USAIC&FH is responsible for developing and managing concepts; doctrine; training; tactics, techniques, and procedures (TTPs); organizational designs; requirements and authorizations; personnel proponency; and lifecycle functions.

The current training path includes a requirement for MOS 09L recruits to score a minimum of 80 on the English Language Comprehension Test (ECLT) for basic combat training (BCT) and advanced individual training (AIT) eligibility. If they score less than 80, the recruits will go to Lackland Air Force Base, Texas, where they will attend English training until they reach the minimum standard. BCT and AIT for the 09L recruits will be at Fort Jackson, South Carolina, supervised by the 4th Training Brigade. DLI native-speaker instructors and military language instructors conduct a four-week AIT, where they teach basic translation and interpretation skills with an emphasis on escort interpreting and operationally relevant vocabulary. Under a new six-week AIT, which will begin in November, there will be an Arabic refresher course taught to dialect speakers and military jargon and vocabulary to those with other languages.

As of today, 14 09L soldiers have deployed to Iraq and Afghanistan. The current class of 25 will graduate 19 August and will also deploy to support other operations. It is too early to judge the effectiveness of this program and its usefulness to the combatant commander. One impediment may be the lack of a security clearance.

I have personally observed 09L training and visited with each MOS 09L student. The loyalty and professionalism of the soldiers who graduate from the program is exemplary. They are enthusiastic, patriotic Americans of Middle Eastern descent whose only desire is to voluntarily serve their country.



Pete Shaver is the Director, MI Foreign Language Training Center at USAIC&FH and the 09L Translator/Interpreter Course Manager. Readers can reach him via E-mail at peter.shaver@us.army.mil and telephonically at (520) 538-1042 or DSN 879-1042.



Contact Information and Submissions



This is your magazine. We need your support in writing and submitting articles for publication.

When writing an article, select a topic relevant to the Military Intelligence community.

Articles about current operations and exercises; Tactics, Techniques, and Procedures (TTPs); equipment; and training are always welcome as are lessons learned, historical perspectives, problems and solutions, and short "quick tips" on better employment of equipment and personnel. Our goals are to spark discussion and add to the professional knowledge of the MI Corps. Propose changes, describe a new theory, or dispute an existing one. Explain how your unit has broken new ground, give helpful advice on a specific topic, or discuss how a new piece of technology will change the way we operate.

When submitting articles to MIPB, please take the following into consideration:

- ☐ Feature articles, in most cases, should be under 3,000 words, double-spaced with normal margins without embedded graphics. Maximum length is 5,000 words.
- ☐ Be concise and maintain the active voice as much as possible.
- ☐ We cannot guarantee we will publish all submitted articles and it may take more than a year to publish some articles.
- ☐ Please note that submissions become property of **MIPB** and may be released to other government agencies or nonprofit organizations for re-publication upon request.
- ☐ Be aware that **MIPB** is posted on the MI Life-Long Learning Center (MIL3C), ICON and AKO (two issues behind the current one) and is available for sale by the Government Printing Office.

What we need from you:

- ☐ A release signed by your local security officer or SSO stating that your article and any accompanying graphics and pictures are unclassified, nonsensitive, and releasable in the public domain. Once we receive your article, we will send you a sample form to be completed by your security personnel.
- ☐ A cover letter with your work and home E-mail addresses, work telephone number, and a comment stating your desire to have your article published. We accept electronic or hard copy cover letters.
- ☐ Your article in Microsoft 2000 or Word 7.0. Do not use special document templates.
- ☐ A Public Affairs release if your installation or unit/agency requires it. Please include that release with your submission.

- ☐ Any pictures, graphics, crests, or logos which are relevant to your topic and enliven the article. We need complete captions (the who, what, where, when, why and how), the photographer's credits, and the author's name on the photos. Please do not embed graphics or images within the text, attach them as separate files. Images should be sent to us in tif or jpg formats. Please note where they should appear in the text.
- ☐ The full name of each author in the byline and a short biography for each. The biography should include the author's current duty assignment, related assignments, relevant civilian education and degrees, and any other special qualifications. Please indicate whether we can print your contact information, E-mail address and phone numbers, with the biography.

The **MIPB** staff will edit the articles and put them in a style and format appropriate for the magazine. From time to time, we will contact you during the edit process to help us insure a quality product. Please inform us of any changes in contact information.

Submit articles and graphics to MIPB@hua.army.mil or mail (on disk or CD) to:

ATTN ATZS-FDT-M (Smith)
U.S. Army Intelligence Center and Fort Huachuca
550 Cibique Street
Bldg 61730, Room 105
Fort Huachuca AZ 85613-7017

If you have any questions, please E-mail us at MIPB@hua.army.mil or call us at (520) 538-0956/DSN 879-0956. Our fax number is (520) 538-1007.



Military Intelligence Professional Bulletin Upcoming Themes and Deadlines for Article Submission

Issue	Theme	Deadline
Jan-Mar 05	Intelligence Support to Operations in the Urban Environment	30 Nov 04
Apr-Jun 05	An Adapting Threat and Adapting to the Threat	5 Jan 05
Jul-Sep 05	Leadership Development in Intelligence	5 Apr 05
Oct-Dec 05	Diversity in the Intelligence Work Force	5 Jul 05

302d Military Intelligence Battalion (Operations) (Corps)

The colors white and teal blue are symbolic of the battalion's former status as an unassigned-to-branch unit. The battalion's war service as a Signal unit is shown by the colors of the fox's mask and background. Intelligence functions of the unit are represented by the censor's stamp on the fox's mask. The key is for the first battle honor (Normandy) of World War II and also alludes to Signal and Intelligence Battalions. The lightning flashes symbolize radio reconnaissance, and the five charges are the five battle honors of the unit.



The 302d MI Battalion evolved from the 3252d Signal Service Company, which was activated in England on 1 April 1944. The 3252d saw service in France and Germany before returning to Camp Kilmer, New Jersey, where it became inactive effective 24 November 1945. The unit was awarded battle credits for participation in the Normandy Campaign. Redesignated the 533d Signal Service Company on 6 May 1948, the unit served until 1 April 1949 in Salzburg, Austria.

On 13 October 1950, the 533d Signal Service Company was redesignated Headquarters and Headquarters Detachment, 302d Communications Reconnaissance Battalion. It was allotted to the Regular Army, assigned to the U.S. Army Security Agency (ASA), and activated at Camp Pickett, Virginia, on 20 October 1950. On 1 July 1951, the unit departed Camp Pickett on permanent change of station to the Maneuver Area at Fort Hood, Texas, and then on 16 July 1952, the unit departed the Fort Hood area for the staging area at Fort Kilmer, New Jersey, enroute to Germany.

The 302d was assigned to the Badernof Kaserne, in Heilbronn, Germany; then the unit transferred to Warner Kaserne, in Bamberg, Germany, effective 15 March 1955, and on to Herzog Base, Herzogenaurach, Germany, during September 1956. Effective 15 October 1957, the 302d inactivated in Germany. It was reactivated 21 December 1975, at Frankfurt, Germany, and assigned to the 502d ASA in support of V Corps. On 1 January 1977, the battalion transferred from Headquarters, ASA to Headquarters, U.S. Army, Europe (USAREUR), and further assigned to V Corps.

Effective 16 April 1984, the 302d ASA Battalion reorganized as the 302d MI Battalion (Operations) (Corps) subordinated to the 205th MI Group, V Corps, under the combat electronics warfare intelligence (CEWI) concept. On 15 October 1985, the 302d MI Battalion was resubordinated from the 205th MI Group to the 205th MI Brigade. On 22 Dec 1994, the 302d MI Battalion transferred to Wiesbaden Air Base, Wiesbaden, Germany, and continues its proud service today.

The unit's mission is to deploy rapidly to a designated contingency area within the U.S. European Command (EUCOM) or U.S. Central Command (CENTCOM) area of responsibility. The 302d conducts intelligence collection operations and provides analysis support to V Corps, in order to ensure successful prosecution of military operations across the spectrum of conflict. On order, the Battalion redeployed to Southwest Asia as part of the 205th MI Brigade and V Corps in the beginning stages of Operation IRAQI FREEDOM I (OIF I), with soldiers on the ground from October 2003 until February 2004. Initially staged at three primary locations in Kuwait, the battalion supported the tactical intelligence mission during offensive operations from mobile command posts moving with the ground forces, as well as the analysis and control element (ACE), which relocated to Baghdad from Kuwait in April 2004. "Re-missioned" as the Combined/ Joint Task Force 7, the ACE served as the backbone for the intelligence structure that supports the Coalition today.

The 302d is the only operations battalion outside the continental United States. It accomplished several groundbreaking missions during OIF with respect to processing and transmitting national and theater intelligence to deployed forces as well as providing forward-deployed unmanned aerial vehicle exploitation teams.

The unit received the Army Superior Unit Award in 1997 for outstanding meritorious service in support of TF Eagle and Operation JOINT ENDEAVOR. Unit recognition for participation in OIF is still pending.

The 320th Fernmelderegiment, in Frankfurt, Germany, has been the 302d MI Battalion's partnership unit since 1981. Partnership activities between the 302d MI Battalion and the 320 FMRG are directed toward strengthening friendship among German and U.S. military intelligence soldiers; they include live-fire and situational training exercises, as well as social events. Partnership units do not deploy with their sister units.

LOYALTY, VIGILANCE, PRIDE!

ATTN ATZS-FDT-M (12)
USAIC AND FORT HUACHUCA
550 CIBEQUE STREET
FORT HUACHUCA AZ 85613-7017

**PRESORTED STANDARD
U.S. POSTAGE & FEES PAID
NIAGARA FALLS, NY 14304
PERMIT NO. 28**

139 *****AUTO**MIXED ADC 140
Koernke, Mary 20
PROQUEST INFORMATION AND LEARNING PERIODICALS
300 N ZEEB RD
ANN ARBOR MI 48103-1553

|.|.|.|.|.|.|.|.|.|.|.|.|.|.|.|.|.|.|.|.|.|.|.|.|.|.|.|.

Headquarters, Department of the Army.
This publication is approved for public release.
Distribution unlimited.

PIN: 081509-000

